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The University of Southern Mississippi
BUILDING CHANGE READINESS PRACTICES FOR
INFORMATION TECHNOLOGY SUPPORT STAFF

by

Dianna Joseph Perkins

Abstract of a Dissertation
Submitted to the Graduate School
of The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy

May 2014

ABSTRACT

BUILDING CHANGE READINESS PRACTICES FOR INFORMATION TECHNOLOGY SUPPORT STAFF

by Dianna Joseph Perkins

May 2014

With the turbulent economic conditions of the healthcare market, organizational leaders are faced with significant factors driving unprecedented change. Healthcare organizations are challenged with reimbursement reductions, high costs, modification of government regulations, and demanding healthcare consumers. Survival for healthcare organizations in this volatile climate requires successful implementation of rapid change. Healthcare leaders recognize a correlation between competitive advantage and the implementation of advanced information technology. Unfortunately, despite the efforts of healthcare leaders, many change initiatives fail. This study explores the effects communication, leadership, and culture strategies have on individual change readiness as perceived by IT support staff in a not-for-profit healthcare system during the rapid implementation of an electronic medical record.

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INFORMATION TECHNOLOGY SUPPORT STAFF

by

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A Dissertation Proposal
Submitted to the Graduate School
of The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy

Approved:

Director

Dean of the Graduate School

May 2014

DEDICATION

I would like to dedicate this accomplishment in my academic career to my son, Jarvis Landry. Watching Jarvis as he strives for excellence has inspired me to always work hard and never give up. Jarvis is an adult with special needs. However, he works endlessly to complete his daily tasks and live a life filled with joy. Jarvis is an active member of the community and positive role model for individuals with special needs.

ACKNOWLEDGMENTS

I would like to extend a special thanks to the Chair of my committee, Dr. Heather Annulis, for her continued support through this long journey. She guided me through my process of developing academic thinking and helped me to visualize progress even when I seemed to experience very little movement for long periods of time. Today, as I look back at my childhood dream to achieve a Ph.D., I am grateful to my Chair for assisting in making this a reality. Special thanks to the members of my committee, Drs. Cyndi Gaudet, Dale Lunsford, and Patricia Phillips. All of them encouraged me to remain steadfast as I strived to achieve academic excellence.

All of this would not be possible without the support of the Chief Operating Officer of my organization. He was relentless in his support of this study and was always available to meet with me. Finally, I would like to thank my husband, Joseph, and my son Jarvis, for their love and relentless support through this lengthy journey of learning and growth.

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CHAPTER I

INTRODUCTION

Background

Change remains evident and ongoing in organizations throughout the global economy. The dynamics of the global economy, modifications in business practices, and increasing competition drive organizations with continuous rapid and radical changes. The motivation to undergo radical change correlates with challenges organizations face. The conditions of the worldwide market force organizational leaders to modify processes in order to align core business practices (Armenakis & Harris, 2009; Beer & Nohria, 2000; Wittenstein, 2008). According to Kraatz and Zajac (2001), rapid strategic change remains important to businesses because it allows for alignment with organizational goals in competitive, technological and social environments in an effort to enhance market advantage and financial growth. Additionally, Armenakis and Harris (2009) suggest survival and prosperity not only mandate change but also require leaders to seek knowledge regarding the logistics of implementing change.

President Kennedy expounds on the mandates of change. He states, “for the time and the world do not stand still. Change is the law of life. And those who look to the past or present are certain to miss the future” (Kennedy, 1963). Wittenstein (2008) concurs with President Kennedy “although we believe that we live in an era of unprecedented change, it has been an ever-present component of life” (p. 1). Organizations continuously explore diverse changes to secure strategies for the future that include performance improvement and financial growth (Weber & Weber, 2001). Businesses that anticipate the future enhance their overall ability to sustain the

competitive advantages in various markets including healthcare. Zhou, Tse, and Li (2006) support this forecast by emphasizing that “organizational change in emerging economies, although difficult, is inevitable” (p. 248).

Organizational leaders must remain vigilant about the conditions of the market within respective industries (Armenakis & Harris, 2009). Vigilance over the conditions of the prospective market environment remain essential because organizational leaders are continuously faced with unprecedented cost reductions, customer demands, technology interventions, and government mandates (Appelbaum & Whol, 2000; Armenakis et al., 2007; Haley, 2007). New entrants into existing healthcare markets and significant changes in the workplace propel organizational leaders to continue to monitor market conditions. The list of forces driving the need for change is endless (Armenakis, Field & Harris, 2007). Yet, despite the efforts of vigilant organizational leaders, successful organizational changes are rare (Armenakis & Harris, 2009; Burnes, 2004; Erwin, 2009; Kotter, 2000). Researcher estimates of unsuccessful organizational change may be as high as 70% (Wittenstein, 2008), and somewhat higher when the change initiatives are significant or risky (Appelbaum & Whol, 2000).

Healthcare and Organizational Change

Healthcare organizations are not immune from implementing and managing rapid organizational change. The new economy introduces opportunities, turmoil, and growth in organizations (Beer & Nohria, 2000). In the United States, healthcare organizations are faced with reimbursement reductions, high costs, modifications to government regulations, fierce competition, and demanding patients and physicians. Revolutionary changes within the practice of medicine are all significant factors driving organizational

change in healthcare systems (Appelbaum & Whol, 2000; Kilpatrick & Holsclaw, 1996; Studer, 2003). Additional factors include an aging population, unhealthy lifestyles, high prescription costs, and a shortage of registered nurses and other healthcare members in the workforce (Spinelli, 2006; Wittenstein, 2008).

Spinelli (2006) asserts that “never before have healthcare professionals faced such complex issues and practical difficulties to keep their organizations viable” (p. 11). Healthcare leaders remain mystified by implementation of change initiatives across healthcare delivery systems (Holt, Armenakis, Field, & Harris, 2007). The Center of Medicare and Medicaid confirm that the national expenditures for healthcare services are on the rise. In 2008, hospitals, physician services, nursing homes, prescription drugs, and other healthcare services consumed 15% of the gross domestic product, totaling over \$1.7 trillion in expenditures. One year later the percentage of gross domestic product increased by 2.6%, totaling \$2.49 trillion in expenses (American Hospital Association Resource Center, 2008).

A study conducted by Cucker, Martin, Whittle, Heffler, Sistro, Laasman, Benson and The Center for Medicare and Medicaid (2011) reveals that in 2009, New England and the Midwest regions, healthcare spending averaged 29 and 17% respectively. These averages are above the national average for personal healthcare spending per capita income (Center for Medicare and Medicaid, 2011). Statistics confirm that healthcare costs in the U.S. continue to exceed the rate of inflation. This increase in healthcare costs is a direct consequence of the demands of today’s consumers for high quality care. Meanwhile payment systems continue to create policies resulting in complex guidelines and reduced reimbursement (Spinelli, 2006).

The demands on hospital leaders to provide high quality healthcare services for today's consumers are present in strategic planning efforts. Healthcare leaders are held accountable through government mandates for patient safety and quality outcomes (Wittenstein, 2008). The Institute of Medicine reports that thousands of patients die every year as result of errors or mishaps (Institute of Medicine, 2000). Change interventions such as the government mandated systemized electronic medical record (EMR) are directly correlated with the efforts of healthcare and hospital leaders to improve the imperfections presently existing in healthcare systems. The EMR is "storage of all healthcare data and information in electronic format with the associated information processing and knowledge support tools necessary for managing the health enterprise system" (Hannan, 1996, p. 2). Despite the efforts of healthcare leaders, the explosion of information and availability of new technology compounds the condition of the healthcare market, and it remains turbulent and very complex.

Due to the ever-increasing changes in today's global economy and concern for high quality patient outcomes, hospitals are discovering a direct correlation between competitive advantage and advances in Information Technology (IT). Healthcare employers throughout the global economy find it necessary to transition IT departments into business partners and strategic planners. The IT departments receive a significant percentage of a hospital's overall budget to implement technology-driven systems that assist with the ability to strengthen service capabilities and become new entrants into various healthcare markets. A hospital IT Assistant Vice-President contends that IT departments are often asked to coordinate organizational endeavors that improve patient

safety service, enhance quality of care, reduce cost, and improve patient satisfaction (personal communication, 2009).

However, one of the challenges IT leaders in healthcare institutions encounter is maintaining the day-to-day activities while rapidly implementing new technology needed for future services (Haley, 2007). Due to the condition of the healthcare market, IT departments face an unprecedented rate of change that ultimately transforms group dynamics, roles, responsibilities, and organizational culture (Haley, 2007; Wittenstein, 2008). The recent enactment of policy by the U.S. government promoting the electronic healthcare record (EHR) presents IT departments with an array of opportunities and challenges. An IT Assistant Vice-President of a not-for-profit healthcare system contends that IT leaders explore innovative processes to maintain current computer systems while enlisting new technology that aligns organizational strategic goals with government mandates (personal communication, 2009). The Department of Health and Human Services (DHHS) and partnering national and state agencies provide opportunities to improve the nation's healthcare systems through health information technology (HIT). Consequently, IT leaders such as Haley (2007) propose IT staff in healthcare organizations prepare to move through impending change rapidly to adhere to government mandates and future organizational services.

Haley (2007) concurs that maintaining day-to-day activities while implementing new technology requires embedding strategies to counteract employee resistance, dissatisfaction, and uncertainty. Therefore, Haley asserts that the six change readiness strategies 1) open and 2) multiple communication; 3) visible and 4) trustworthy leadership; 5) anchoring behavior; and 6) encouragement of individual participation are

pertinent to support the workforce through successful implementation of organizational change. Haley's perspective on managing change through employee support and genuine participation during rapid change aligns with Kotter (1996) and other similar researchers of change (Haley, 2007; Kotter, 1996).

According to Kotter (1996), employees must be engaged and encouraged to participate during change initiatives to understand the various aspects of a change initiative. Kotter (1996) suggests that during the beginning stages of change, employees generally lack comprehension of the entire initiative. Therefore, the initial steps of change require a significant amount of time and energy. The essential resources necessary for successful change are important because the demand for organizational transformation is expected to increase significantly over the next two decades. Despite the time and energy required to implement change initiatives, businesses in today's economy seek ways to effectively manage this rapidity of change. Therefore, change agents seek support from individual employees at all levels of the organization (Eby, Adams, Russell, & Gaby, 2000; Levin & Gottlieb, 2009; Laschinger et al., 2010). Seeking support from individual employees at all levels of the organization enables healthcare leaders to develop organizational cultures that empower employees to actively participate in change initiatives (Haley, 2007; Kanter, 1977).

Burnes (2004) suggest that a stable culture must penetrate all aspects of a nation's life. Like the stable culture of a nation's life, the implementation of successful change and healthcare reform requires the penetration of all facets of an organization. Change within healthcare organizations often requires modernization and restructuring of the administrative systems within the workplace to include revitalization of core business

strategies. Over the last two decades, change initiatives have included titles such as shared governance, re-engineering, quality improvement, total quality improvement, downsizing, including the use of the slogan “doing more with less”, and cultural change (Curtis & White, 2002). Despite fancy labels and the world’s complexity, organizational strategic goals remain the same to simply survive in a new and competitive economy (Kotter, 2000).

Although change is necessary in healthcare, implementation remains complicated. For many healthcare organizations, the perceived complexity of barriers to change are so overwhelming that healthcare and hospital leaders simply lose their passion (Studer, 2003). Initiatives supported by leaders who lose their passion to assist others within the workplace often result in ineffective or failed organizational change. Kotter (1995) alleges this reluctance occurs because some leaders fail to realize change is a series of phases requiring a considerable length of time, and mistakes in any phase can slow the momentum or negate project gains. Unfortunately, hospitals and other healthcare providers are included in the category of organizations with many unsuccessful change initiatives despite the universal belief that healthcare organizations continue to experience significant change (Erwin, 2009). Additionally, Wittenstein (2008) suggests an increasing number of failed change initiatives remain striking, particularly in hospitals given healthcare leaders have spent the last two decades implementing various change initiatives to “reduce costs, become more business-like, and improve patient care” (p. 1). Studer (2003) suggests successful change in healthcare begins with a “commitment to purpose, worthwhile work and making a difference” (p. 26), all factors which are necessary for creating world-class healthcare organizations.

World-Class Organization in a Not-for-Profit Health System

According to Studer (2003), a change strategist for healthcare organizations, the journey to a world-class healthcare organization originates with a measurable commitment to excellence. However, a commitment to excellence is much more than changing products, services, and designs. Excellence during rapid change occurs when “employees feel valued, physicians feel that their patients are getting great care and patients feel the service and quality they receive is extraordinary” (p. 45). President and Chief Executive Officer of a not-for-profit healthcare system in Southwest Louisiana and an advocate of the Studer (2003) change model concurs that excellence requires management of instantaneous change. The senior executive emphasizes successful management of rapid change requires investment in human capital. Employers investing in human capital recognize that market advantage and advancement lie within the knowledge, skills, and abilities of their employees (personal communication, 2009).

Additionally, the senior executive of the not-for-profit healthcare system contends the journey to excellence provides a framework that promotes leadership training, effective communication, and a culture supportive of change (personal communication, 2009). At the core of successful change is the individual’s readiness for change (Armenakis et al., 2007; Wittenstein, 2008). Leadership training, effective communication, and a culture of genuine employee participation support individuals within the workforce through successful rapid change which remains essential in today’s economy (Haley, 2007; Levin & Gottlieb, 2009; Reynolds & Warfield, 2009). The journey of excellence framework also contributes to cohesive relationships among healthcare workers and supplies a framework that empowers individual employees to

contribute to successful implementation of organizational change (Banutu-Gomez & Banutu-Gomez, 2007; Haley, 2007; Studer, 2003; Wittenstein, 2008).

Statement of the Problem

The climate of the U.S. economy and the number of change initiatives continuing to impact IT staff in healthcare necessitates exploration of avenues to enhance change readiness (Haley, 2007). The regulatory mandates such as “Information Classification of Disease (ICD-10), meaningful use, strategic initiatives like electronic health record (EHR) implementations, health information exchanges (HIEs), accountable-care organizations (ACOs), and reimbursement changes are striking at the same time as budget crunches” with multiple demands on IT staff (Advisory Board Company, 2012, p. 3). The healthcare industry continues to experience unremitting change. The implementation of IT change initiatives occurs rapidly and often in overlapping timeframes (Haley, 2007). The IT staff is expected to remain engaged while complex technology is implemented to support the strategic goals of the organization. Haley (2007) argues that unremitting change impacting the IT workforce results in an overwhelmed and disengaged staff.

According to Armenakis, Harris, and Mossholder (1993), a key contributing factor to successful implementation of organizational change is readiness. Change theory supports additional contributing factors to successful organizational change such as open communication, visible and trustworthy leadership, and a culture which encourages individual employee participation (Haley, 2007; Weber & Weber, 2001; Wittenstein, 2008). Based on this theory, understanding the role of readiness is paramount for

healthcare systems as they struggle to sustain market advantage in a turbulent economic environment.

Clark, Cavanaugh, Brown, and Sambamurthy (1997) contend that change readiness capabilities in Information Systems (IS) departments yield measurable gains in performance. According to Clark et al., as conditions of the healthcare market become more turbulent and IT departments realign themselves as strategic partners, it is imperative that the IT workforce perfect abilities to build change readiness strategies. Clark et al. define change readiness as the “ability of an IS organization to deliver strategic IT applications within short development times by utilizing a highly skilled internal workforce” (p. 425).

A literature review of organizational change management reveals an excessive amount of data supporting implementation of rapid transformation (Fraham & Brown, 2005; Wittenstein, 2008). Despite published articles and books, failed change implementation continues (Haley, 2007; Kotter, 1996a; Thor et al., 2004; Wittenstein, 2008). Thor et al. suggest 40% to 90% of all changes implemented in healthcare organizations fail. As previously mentioned by Appelbaum and Wohl (2000), the percentages of failed change initiatives in healthcare institutions may be even higher.

In healthcare organizations, implementations of technological changes often result in numerous false starts, failures, and substantial resistance. Resistance to change in large IT change initiatives not only delay projects but exceed budget constraints (Kim & Kankanhalli, 2009). In many instances, the technology is purchased, computed for implementation, but never distributed to various end users. False starts, failure, and

substantial resistance have been particularly problematic in healthcare systems where service, quality, and satisfaction are essential (Wittenstein, 2008).

Understanding the need for rapid change in the healthcare industry and the dilemma that organizations face is critical. The turbulent environment of the healthcare industry continues to have a direct impact on IT support staff. Healthcare leaders expect rapid delivery of complex applications that support the strategic goals of the organization and changes in the overall market. The number of change initiatives directly impacting healthcare IT departments is significant and continually increasing (Haley, 2007). Today, a turbulent healthcare market and increased government mandates drastically increase the number of change programs in healthcare. Organizations within the healthcare industry are embracing best practice business strategies which require implementation of new technologies and standardization of processes (Santamour, 2012). Building an environment of safety and quality requires healthcare facilities to “transform healthcare delivery, partnering with physicians and insurers to improve care across the continuum, reducing errors and avoidable readmissions, boosting patient satisfaction, and taking a deep plunge into population health” (Santamour, 2012, p. 10).

The U.S. government’s enactment of policies promotes the use of the electronic health record (EHR) under the American Recovery and Reinvestment Act (ARRA). The funding mandates adopted by ARRA remain a driving force for rapid change in the healthcare industry (personal communication, 2009). Healthcare providers throughout the nation can potentially qualify for financial incentives by promoting “*meaningful use*” of the health record (personal communication, 2009). The Department of Health and Human Services (DHHS) and partnering agencies developed a methodology to encourage

healthcare providers to improve patient care by embracing Health Information Technology (HIT). While the governing policies and procedures for executing on this concept continue to fluctuate, the timeline for implementing technology and submitting data remains aggressive.

Survival for healthcare providers in this volatile climate requires successful implementation of rapid change initiatives. The healthcare industry is an intricate part of a market with opportunities that open and close quickly. The monetary incentives offered to healthcare providers by the U.S. government require installation of technology within a limited timeframe, which necessitates implementation of rapid change interventions. Successful installation of technology during a rapid change intervention remains a dilemma because much of what is mandated by regulatory agencies is out of the control of healthcare leaders (Santamour, 2012). A key component of organizational change influencing success or failure is readiness for change among individuals within the organization (Armenakis et al., 1993; Haley, 2007; Wittenstein, 2008).

Wittenstein (2008) contends that “a critical point to understanding this dilemma is that organizational readiness to change is more than the technical ability of the organization to change” (p. 11). The organization’s ability to interact effectively with its human capital, including appreciating people’s perceptions, values, and beliefs is essential to success (Armenakis & Harris, 2002; Huselid, Becker, & Beatty, 2005; Haley, 2007; Weber & Weber, 2001; Wittenstein, 2008). Therefore, effective interaction with human capital can lead to understanding individual readiness for change within an organizational culture that promotes genuine staff participation. Kanter (1980, 2006)

argues staff participation and effective communication empower employees to engage in activities necessary during organizational change.

Understanding change readiness remains crucial to organizational leaders because the dynamic economic market compels businesses to continuously modify strategic goals, organizational structure, and culture. The IT workforce provides core information management support directly to patient care areas (Haley, 2007). The IT support staff manages decision support software and other applications assisting the organization to adhere to strategic priorities, government mandates, and anticipated challenges.

Purpose of the Study

The purpose of this study is to explore the impact communication, leadership, and culture have on individual change readiness that supports IT staff through rapid organizational change. This study will analyze IT supports staff readiness in a healthcare environment for an organizational change implementation. The current study examines the effect Haley's (2007) six strategies have on individual change readiness in a not-for-profit healthcare system during rapid implementation of a specific change, an EMR. Haley's (2007) change readiness strategies for IT support staff include six factors which are divided into three categories. The categories are communication, leadership, and culture. Haley suggests without multiple methods of open communication, visible and trustworthy leadership, and a culture that encourages individual employee participation, change initiatives cannot deliver maximum benefits and in some cases do not deliver at all.

Significance of the Study

Understanding the effects of communication, leadership, and culture in the context of organizational change may be useful in managing successful implementation of rapid change for IT support staff. Armenakis et al. (1993), Appelbaum and Wohl (2000), Haley (2007), and Wittenstein (2008) suggest successful implementation of rapid change can be influenced by individual change readiness. Therefore, understanding the effect of individual change readiness may assist organizational leaders to clearly identify strategies influencing change and potentially lead to overcoming barriers to change (Wittenstein, 2008).

Research Objectives

The study addresses the following research objectives:

RO1: Describe the individual IT support staff's socio-demographic characteristics: a) gender, b) race, c) age, and d) job classification.

RO2: Determine the effect communication strategies have on individual change readiness as perceived by IT support staff.

RO3: Determine the effect leadership strategies have on individual change readiness as perceived by IT support staff.

RO4: Determine the effect culture change strategies have on individual change readiness as perceived by IT support staff.

Limitations

One of the primary limitations of this study is asking participants to reflect on a change initiative occurring in the past. Participants may have some difficulty remembering initial experiences during the implementation of the EMR as approximately

18 months passed before the interviews. Additionally, interviewees may provide biased responses because of the researcher's status as a member of the IT support team (Corbin & Strauss, 2008; Creswell, 2003). Sensitivity enables the researcher to “grasp meaning and respond intellectually (and emotionally) to what is being said in the data in order to arrive at concepts that are grounded in data” (Corbin & Strauss, 2008, p. 41). Despite the extensive information provided concerning confidentiality and sensitivity, participants may not be comfortable providing candid responses.

Secondly, common method bias may be introduced when using a single source of data in a study. For best study results “data should come from multiple sources or be subject to validation” (Wittenstein, 2008, p. 38). The information provided will be filtered through the understanding of the interviewees and is the only data source utilized for this study (Creswell, 2003). The single source of data is a limitation because this study occurs in one hospital and is limited to one change initiative.

Delimitations

The study will be confined to interviewing the IT support staff of a not-for-profit healthcare system to determine participant experiences during the implementation of a specific EMR. The instrument used in this study was developed from a self-report battery that “researchers can use to gauge the internal context or climate of change, the process factors of change, and readiness for change” (Bouckenooghe, Devos, & Van den Broeck, 2009, p. 559). The interview questions selected explore the impact communication, leadership, and culture have on change readiness that support IT staff through successful implementation of rapid organizational change.

Conceptual Framework

The present study examines individual change readiness and the influence specific variables have on successful implementation of rapid IT change initiatives. The following conceptual framework serves as a map to provide an explanation of the study. The theoretical framework of the study includes Armenakis et al.'s (1993) change readiness theory, Ajzen's (1991) theory of planned behavior, and Kanter's (1977) structural theory of organizational behavior. See Figure 1.

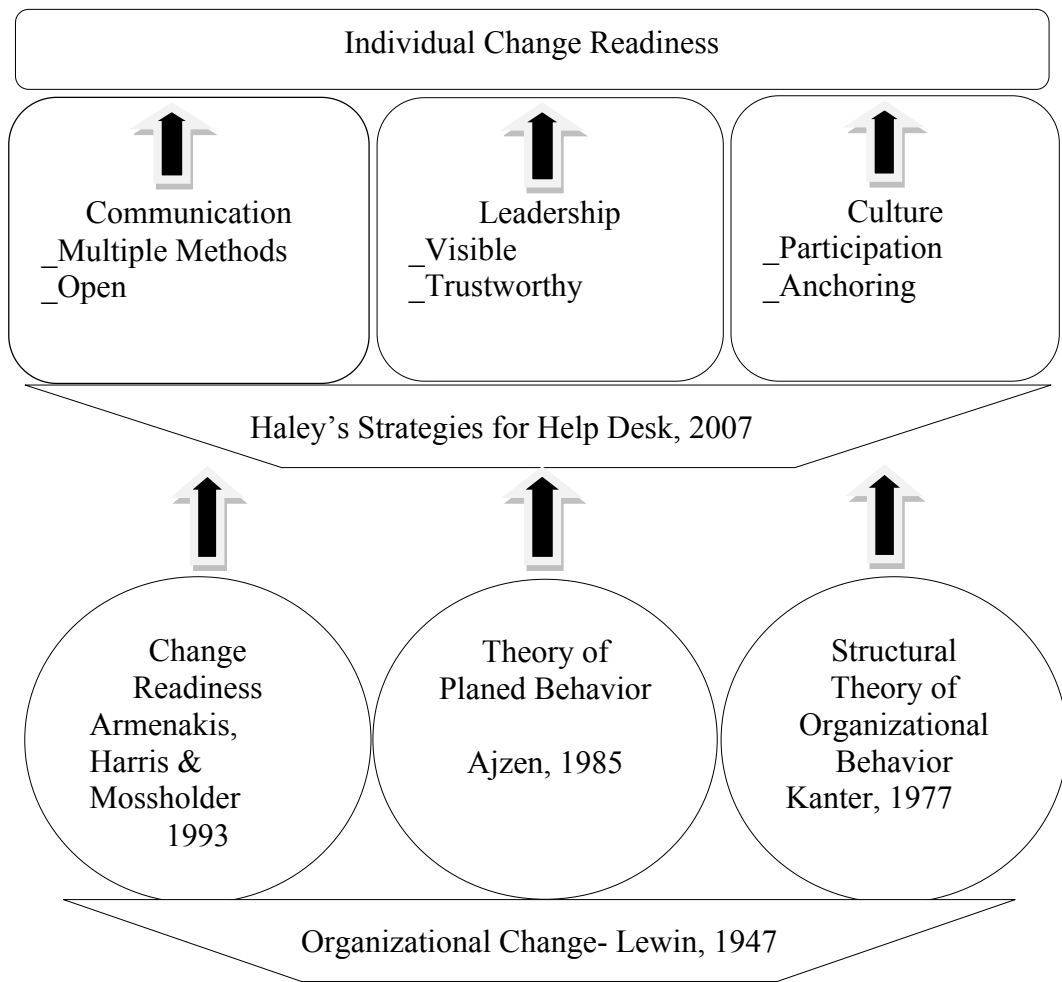


Figure 1. Conceptual Framework.

Lewin's formative theory of organizational change supports Haley's (2007) change readiness strategies for IT support staff. Lewin's (1951) three stages of change, unfreezing, change, and refreezing reveal a formula for organizational change and serve as the foundation for this study. The sequence of this model is essential to achieving organizational change. Changing the current behavior of employees prior to implementing a change is necessary and referred to as unfreezing. During this stage the change initiative is communicated and adoption begins to take place. Once the change is implemented, employees engage and support the change, then refreezing of the new behavior can occur (Armenakis et al., 1993; Lewin, 1951).

The review of any type of successful change initiative will reveal Lewin's process of change (Armenakis & Harris, 2002; Haley, 2007; Walinga, 2008; Wittenstein, 2008). Burnes (2009) notes there is "little question that the intellectual father of contemporary theories of applied behavioral science, action research and planned change is Kurt Lewin" (p. 364). Building on Lewin's (1947) three stages of change, Armenakis et al., propose a model for creating readiness and suggest that readiness is a precursor for overcoming resistance (Holt et al., 2007).

Organizational theorists agree that readiness is a prerequisite for successful change. Readiness is reflected in the individual member's beliefs and values and attitudes and their intent to adopt organizational change interventions (Armenakis et al., 1993). Creating readiness is a concentrated effort by change agents to alter the beliefs of individual employees which, in turn, can result in behavior change. The creating readiness for change model "draws on individual level cognitive change, collective behavior, social-information processing, mass communications, and organizational

change literature” (Amenakais et al., 1993, p. 683). Readiness for change has been studied extensively and used in other theoretical models. Researchers assert that readiness is one of the most important factors in the individual employee’s support for change intervention (Holt et al., 2007). Successful implementation of rapid organizational change remains dependent on the extent to which the individual employees are ready for the urgency of change (Amenakis et al., 1993).

Some researchers believe that Ajzen’s (1991) theory of planned behavior (TPB) can be utilized by leaders to understand readiness for change in relation to the employee’s intentions to support organizational change initiatives. Ajzen (1991) asserts that explaining human behavior is complex. Researchers studying psychology suggest that the TPB presents factors offering insight into the importance of effective communication and participation as determinants for readiness of change. Therefore, it is suggested that clear and open communication as well as participation in the decision-making process have a positive impact on the employee’s intention to participate in organizational change (Jimmieson, Peach, & White, 2008).

Kanter’s (1977) structural theory of organizational behavior also proposes employees participating in the decision-making process empower individuals in the workplace and encourage adoption of change initiatives. The structural theory of organizational behavior offers a useful principle for understanding the individual employee’s interpersonal and social dynamics in the workplace. This theoretical perspective exploits the individual intent to exert control and assume responsibility by performing tasks required to implement an organizational change. The core of this theory is formulated on the principle that organizational factors are determinants of an

individual's behavior rather than the person's characteristics. Resistance and employee inadequacy often result in employees feeling powerless during change (Kanter, 1977).

Since Lewin's (1947) early research, theorists from diverse disciplines continue to contribute to the understanding of organizational change and individual change readiness as seen in the work of Armenakis et al. (1993). Haley (2007) supports the theories of Armenakis et al. (1993), Ajzen (1991) and Kanter (1977) by stating that, consistent internal strategies must be put into practice to support the workforce through current and emerging change. Carter (2008) concurs that "strategy is not new to the change management realm. Strategies are ways of pursuing the vision and mission" (p. 20). According to Haley, leaders who successfully implement change counteract employee dissatisfaction and uncertainty by embedding readiness strategies. Additionally, Haley (2007) alleges meaningful approaches "represent a powerful and lasting multi-pronged approach to embedding change readiness strategies while enhancing the success of organization change initiatives" (p. 141).

Haley's (2007) six strategies for help desk support staff contribute to the work of Lewin (1947) by providing a framework that supports personnel through rapid change (see Table 1).

Table 1

Haley's Six Strategies for Help Desk

Categories	Strategies	Descriptions
1. Communication	Multiple Methods	Timely and relevant information sharing about the nature and reason for change using various methods such as email, face-to-face forums, workshops, websites and staff meetings.
	Open	Genuine interactive two-way communication between staff and leadership using sub-processes of persuasion, information sharing, mediation, conflict resolution, listening and collaboration.
2. Leadership	Visible	Accessible and supportive to staff by being visible change agents and informal change champions, "walk the talk".
	Trustworthy	Staff wants to feel safe to participate and engage with leadership. Important to develop a climate of trust and transparency between front line staff and management.
3. Culture	Participation	Genuine participation affording staff the opportunity to provide input and receive feedback from leadership.
	Anchoring	Adopting improved strategic change planning, process monitoring, consistency, and adequate resourcing for change in IT.

Source: Haley, 2007

Consequently, Haley suggests six strategies: 1) open and 2) multiple methods of communication; 3) visible and 4) trustworthy leadership; 5) anchoring behavior; and 6)

encouragement of individual participation. These strategies are pertinent to individual change readiness for results of successful implementation of organizational change.

Definition of Terms

1. *Acute care hospital* – hospital that provides short-term care (Century Health Solution, 2010).
2. *Change management* – analysis of behavior or performance during the transition phase from current state to desired state (Armenakis et al., 1993).
3. *Communication* – the exchange of information among individuals from which meaning is contingent (Weick & Quinn, 1999).
4. *Culture* – involves the collective programming of the mind that distinguishes not societies or nations but also industries, professions, and organizations (Martinsons, Davison, & Martinson, 2009).
5. *Electronic health record* – patient information which can include wellness information distributed across multiples sites and accessed by vast numbers of stakeholders. The stakeholders include the patient themselves and their caregivers (Kalra & Ingram, 2006).
6. *Electronic medical record* – “storage of all healthcare data and information in electronic format with the associated information processing and knowledge support tools necessary for managing the health enterprise system” (Hannan, 1996, p. 2).
7. *HIT (Health Information Technology)* – “Involves the exchange health information in an electronic environment” (Department of Health and Hospital). Introduction of applications into clinical environments to share information among clinicians improve patient care.

8. *Leadership* – is a relationship. The affiliation resides between those who lead and those who follow (Haley, 2007).
9. *Medium size hospital* – small, 1–100 beds; medium, 101–300 beds; large 301–500 beds and extra-large, >500 beds (Century Health Solution, 2010).
10. *Organizational change* – is a process that follows the sequence of unfreezing, change, and re-freezing (Lewin, 1951). It is the “difference in how an organization functions, who its members and leaders are, what form it takes, or how it allocates its resources” (Weick & Quinn, 1999, p. 362).
11. *Organizational Culture* – shared beliefs and values of members within an organization. Organizational culture is created by an individual who has a vision, goals, and belief about how transformation should take place (Banutu-Gomez & Banutu-Gomez, 2007).
12. *Rapid change* – accelerating of change (Appelbaum & Whol 2000; Haley, 2007).
13. *Readiness* – involves the transformation of individual perceptions across an identified group of employees. Refers to the individual’s “beliefs, attitudes, and intentions regarding the extent to which changes are needed and the organization’s capacity to successfully undertake those changes” (Armenakis et al., 1993; Eby et al., 2000, p. 326).
14. *IT Readiness* – Change readiness is the ability of an information systems (IS) organization to deliver strategic IT applications within short development cycle times by utilizing a highly skilled internal IS workforce (Clark, Cavanaugh, Brown, & Sambamurthy, 1997).

15. *Successful change* - begins with a result-driven approach that offers greater prospective because the focus is on achievement (Appelbaum & Wohl, 2000).

Summary

The dynamics of the global market and its mandates force organizations to engage in rapid organizational change. Organizations sustaining competitive advantage require accountability, high performance, and flexibility. Because of increasing demands, organizations are continuously forced to reevaluate strategic goals and implement change initiatives. To remain competitive in a very tempestuous market, organizations must employ techniques to effectively accomplish change. Yet despite the employment of effective techniques major change initiatives fail (Appelbaum & Wohl, 2000; Armenakis & Harris 2002; Haley, 2007; Wright & Thompsen, 1997).

Healthcare systems are not exempt from experiencing failure of major change initiatives. Healthcare organizations in today's economy must strive for excellence which requires more than simply changing products and services. Excellence occurs when employees are valued, physicians are comfortable with care provided to patients, and patients perceive care as high quality. The journey to excellence promotes investment in leaders through training, effective communication at all levels of the organization, and a culture that supports change and employee participation (Studer, 2003).

Despite the efforts of experienced leaders individual employee resistance remains a key factor of failed change initiatives even when staff acknowledges that change is necessary. Many factors contribute to effective change. This study proposes to

determine the impact that communication, leadership, and culture have on individual change readiness that supports IT support staff through rapid organization change.

CHAPTER II

LITERATURE REVIEW

The literature review themes supporting this study include the process of change, organizational change, barriers to change, change readiness, change readiness factors, communication, leadership, culture, healthcare, and organizational change. Additionally, the review includes historical data and current views surrounding each categorical topic. Applicable studies are explored to determine the effects of communication, leadership, and culture on change readiness.

The Process of Change

Change is the process of altering the current state to a desired state, as defined by Kurt Lewin, an influential theorist of the 20th century (Wittenstein, 2008). Lewin (1947) affirms that “change and constancy are relative concepts; group life is never without change, merely differences in the amount and type of change exist” (p. 13). Wittenstein, however, cautions that extensive knowledge of current and future states cannot ensure successful behavioral change.

Lewin’s three stages of unfreezing, changing, and refreezing introduce movement to the context of change behavior. Moreover, this framework requires abandonment of prior knowledge and beliefs (Wittenstein, 2008). Scholarly researchers, such as Armenakis et al., 1993, Armenakis & Fredenberger, 1997, Jimmieson et al. (2004, 2008) and Prochaska and Norcross (2001) use the concept of moving through stages to understand individual behavioral change. Building on the notion of movement, psychologists Prochaska and Norcross (2001) classify behavioral change as “a process that unfolds over time and involves progression through a series of six stages” (p. 443).

Progression through these stages focuses primarily on planned behavioral change and factors that influence change (Ajzen, 1991; Wittenstein, 2008). Each stage represents a specific time period as well as tasks required for movement to the next step. However, the time an individual spends in each stage varies. The six stages of the Prochaska and Norcross (2001) trans-theoretical model (TTM) framework include:

- Pre-contemplation: the individual does not exemplify behavior indicative of readiness for change because he is unaware or under-aware.
- Contemplation: the individual is aware of the need for change but procrastinates in taking action.
- Preparation: the intent to support the intervention within a 30-day period.
- Action: the commitment and the individual are admittedly engaged in the change.
- Maintenance: the display of new behaviors with efforts to avoid relapse.
- Termination: the individual completes the change process and is no longer concerned about reverting to old behaviors. (p. 443)

Over the last two decades, extensive studies on the TTM framework and the movement through stages have been conducted. The primary focus of the studies compares individual change to health behavior (Prochaska & Norcross, 2001).

Wittenstein (2008) suggests that the TTM framework essentially provides understanding of an individual's readiness for change. Successful implementation of change remains dependent on the extent to which individuals are ready for the urgency of change (Amenakis et al., 1993). Holt, Helfrich, Hall, and Wiener (2008) advocate that challenges associated with change continue to be studied by scholars and researchers and the "consistent finding is the importance of initial readiness for change" (p. 550).

Organizational Change

Change, whether good or bad, remains inevitable in today's organizations.

Westover (2010) contends "there is nothing more permanent than change" (p. 45).

Wittenstein (2008) adds credence to this notion with the affirmation of the role of change in all aspects of life. McLagan (2003) supports the quote by stating that employees must accept change as a "way of life" instead of "business as usual" (p. 52). The unpredictable state of the economy and societal changes cause organizations to perpetually search for strategies to differentiate themselves from competitors. Moreover, the historical processes that worked for many organizations no longer support today's market conditions. According to Kotter (1996a), organizations in the 1960s touted, "if it ain't broke, don't fix it," and enjoyed stability in the workplace (p. 18).

Throughout the late 20th century, change and creative innovation occurred at a slower pace with less competition (Kotter, 1996b). Van de Ven and Poole (1995) support and expound on Kotter's (1995) theory concerning the movement of change in the 1990s offering a definition of organizational change, "an event, an empirical observation of difference in form, quality, or state over time in an organizational entity" (p. 512). Although the researchers suggest that change remains unremitting, Van de Ven and Poole note that in the late 1990s it occurred at an especially languid pace.

In the 21st century, change evolves more rapidly due in part to economic crises promoting businesses to explore unfamiliar territories. In addition, the social, technological, and economic changes in the marketplace force organizations to alter strategic goals and business models more frequently than in the past. Weber and Weber (2001) report data from a study conducted by the American Management Association,

citing that 84% of U.S. companies have at least one major change initiative occurring within their perspective organizations while 46% have three or more occurring concurrently.

Armenakis and Harris (2009) remain steadfast in their assertion that, “no organization is immune to organizational change” (p.127). Instead organizations must maintain a sense of attentiveness to the state of the market and the position of their respective organization (Armenakis & Harris, 2009). Pettigrew, Woodman, and Cameron (2001) suggest the study of organizational change lacks maturity because businesses require constant change. Organizations encounter challenges that require attainment of specific knowledge addressing the effectiveness of change implementation (Armenakis & Harris, 2009). However, effective implementations of change initiatives remain elusive, contributing to the on-going pursuit by businesses to generate responsive and sustainable change models (Armenakis & Harris, 2009; Burnes, 2004; Haley, 2007; Kotter, 2000).

As today’s businesses continue to re-evaluate positions within the marketplace, many are forced to transform organizational culture, potentially leaving behind successful processes and practices (Bernerth, 2004). Appelbaum and Wohl (2000) believe the future remains grim for any organization in today’s market with the inability to change rapidly. Consumer needs often drive such changes. Technology advancement provides consumers with opportunities for retrieval of data to make informed decisions about products and services. Market competition and use of technology by consumers contribute to the acceleration of change in many businesses.

According to Smith (2009), accelerated organizational change has become “the -new normal” for today’s companies (p. 1). Brown and Eisenhardt (1999) supports rapid

change initiatives, particularly for organizations with technology-based products and services. Brown expounds, sharing that revolutionary transformation provides many advantages. Some advantages include improvement in product quality, reduction in cost, and the potential to minimize risk factors. Brown and Eisenhardt (1999) also asserts rapid change maximizes competitive advantage.

Many organizations adopt rapid change to enhance competitive advantage, while others simply try to ensure basic survival (Hall, 2009). Business affiliations, mergers, acquisitions, and innovative partnerships can occur overnight. Despite the growing need to sustain competitive advantages, many change initiatives continue to fail.

Barriers to Change

Appelbaum and Wohl (2000) suggest organizational change results in failure more frequently than successful change initiatives. Statistics from organizational change initiatives indicate that success rates in *Fortune 1000* companies fall below 50% and, in many cases, below 20% (Appelbaum & Wohl, 2000). Scholarly researchers propose resistance to change often results in unsuccessful organizational transformation. Resistance to change continues to be studied in numerous organizations and as far back as the 1940s (Smith, 2005). Over the years, the studies provided various rationales outlining why resistance to change occurs, coupled with an inverse impact on organizational prosperity and growth. According to Burnes (2009), many reasons exist as to why organizational change initiatives fail, including failure for management to adequately adapt the mindset and employ strategies to maintain change. Kotter (1996a) contends that organizations initiating change activities without an effort to create a sense of urgency are less likely to experience success. Change initiatives often fail as leaders

underestimate employees' discomfort with change. Additionally, Kotter proposes that approaches adopted when implementing change initiatives habitually fail to take into account the effort needed to motivate the workforce to participate in change.

Lack of participation can occur when employees may be comfortable with the status quo and cannot envision modification of something that worked in the past. Workers may become complacent with day-to-day activities and fail to recognize the need to espouse change. Some employees find moving from the known to the unknown intimidating. Change often results in an employee's loss of control, predictability, and certainty. Some employees view change as a process negatively impacting self-interest. Other employees feel change reduces overall power or influence within the organization (Curtis & White, 2002). Employee resistance to change presents itself in the workplace in various ways. Some employees mildly resist change, while others display inappropriate behavior for the workplace. Complacency, fear, and resistance represent only some of employee attitudes when faced with change. Kotter and Schlesinger (2008) suggest that some employees simply have a low tolerance for change and allow fear to suppress successful acquisition of knowledge, skills, and abilities needed to adopt new initiatives. Humans encounter difficulties embracing change, with some having more difficulty than others to adapt (Kotter & Schlesinger, 2008).

According to Kotter (1996a), high levels of complacency in the workplace frequently result in resistance to change. Bovey and Hede (2001) state that "resistance is a natural and normal response to change" (p. 372). This type of behavior by individual employees may discredit, delay, or prevent workplace transformation (Curtis & White, 2002). Appelbaum and Wohl (2000) support the theory by suggesting that change

initiatives threatening stability or appearing dissimilar often result in employee misgivings. Moreover, Kotter and Schlesinger (1979) propose that even experienced managers fail to identify employees within the organization who will resist change initiatives and why, prior to implementation.

Bovey and Hede (2001) suggest the importance of businesses recognizing that individual employees receive change differently. Appelbaum and Wohl (2000) and Haley (2007) endorse Bovey and Hede's theory by stating that change fails frequently due to managers and employees interpreting change differently. Organizational leaders may recognize change as an opportunity to reduce costs, to increase quality, and to sustain competitive advantage, while the workforce often associates change with loss, disruption of activities, and uncertainty. Numerous managers fail to invoke a sense of urgency as the focus centers upon successful outcomes for the organization and not upon the individual members of the workforce.

As previously mentioned, Armenakis et al. (2007a) assert that according to Lewin's change model, successful change concentrates on the individual, requiring an employee to progress through three stages of unfreezing, moving, and refreezing. Armenakis et al. reference Lewin's work as a framework used by many researchers and managers for understanding individual and group behavior during change. According to Armenakis et al., Lewin's extensive study of change continues to predict the impact transformation has on the organization's changing world. Schien (1996) refers to Lewin's three stages of change as the "most powerful model of the change process in human systems" (p. 2). Schien (1996) discusses the first stage of Lewin's change model, unfreezing, in the context of "quasi stationary equilibria; a large force field of driving and

restraining forces” (p. 2). From his clinical and social work with military personnel and civilian prisoners, Schien proposes the normality of human behavior to resist changing the status quo. Therefore, the stage of unfreezing is imperative to remove the defenses of restraining forces. During the unfreezing stage, the workforce is motivated and prepared for the change initiative.

Unfreezing is an opportunity to remove any obstacles or barriers that may impede change (Schien, 1996). Armenakis et al. (1993) propose that resistance or outright failure implies that effective unfreezing did not take place prior to implementing a change intervention. In Lewin’s change model, the employee refutes the status quo, advances by adopting change, and then experiences refreezing by embracing the change (Armenakis et al., 2007a). The model highlights that employees’ attitude regarding organizational change directly impacts overall success. Additionally, an employees’ approach to change impacts other factors such as employee satisfaction and morale in the workplace (Martin, Jones, & Callan, 2006). Individual employee’s response to change continues to drive successful change implementation.

Martin et al. (2006) contends that “most failures are due to human factors such as change-related response, attitudes and behaviors” (p. 146). Based on the work of noted scholars such as Lewin (1947), Armenakis et al. (2007), and Martin et al. (2006), a managers’ role remains pivotal to the process of change as they must espouse protocols that assist employees in successfully navigating through the three stages of change or the initiative will potentially fail.

Fernandez and Rainey (2006) add to the argument that managers are crucial to the change process and have the power to effect change. Additionally, research indicates that

in many organizations, change fails as a result of business leaders introducing the organizations' ideas for transformation without adherence to the intervention.

Oftentimes, managers are aware of the necessity to change but are unable to emotionally make the conversion (Kotter & Schlesinger, 1979). In these instances, management fails to truly experience the three stages of change as described in Lewin's change model. For many leaders, change offsets routines, which include addressing daily tasks while keeping everything progressing smoothly. For other leaders, not only do they fail to actively participate in the change process, the manager may view the change as a nuisance and fail to recognize the importance of employees progressing through the change continuum (Kotter & Schlesinger, 1979).

Bernerth (2004) introduces the idea that numerous businesses trust that rapid change can be initiated with great success with or without the individual employee. Bernerth further reports individuals of authority are the contending force for change. The change intervention responsibility traditionally falls on one individual or a small group of people. Pascale and Millernamm (1997) recognize some organizations introduce continuous improvement programs with little regard for employee expectations. Bernerth (2004) suggests employee expectations are irrelevant and a by-product of readiness and organizational change. Unfortunately, many change agents ignore employee expectations or treat them as a burden. During change interventions, managers expect employees to work harder, yet the momentum for positive results may be slow or never become a reality. Moreover, in work environments, a single individual or small group takes ownership of the intervention or the feasibility of the change. As a result of lack of

adoption by the vast majority of the workforce, successful implementation of the change initiative decreases.

A study conducted by Jandaghi, Matin, and Farjami (2009) concludes managers lacking the ability to inspire teams to strive beyond the status quo and instead rally around organizational strategic goals are less likely to experience success. Beer and Nohria's (2000) study of change supports the theory of Jandaghi et al. by suggesting that despite the increasing need for change very few initiatives are successfully implemented. However, Beer and Nohria concur that the contrast to failure is employee participation.

Additional variables impacting successful changes may occur when organizations employ short-term fixes such as employee reductions and other cost cutting strategies (Jandaghi et al., 2009). Companies may implement short-term fixes in anticipation of economic conditions changing. According to Hall's (2009) study, leadership interventions providing short-term fixes become particularly evident in non-profit organizations. Many short-term change initiatives fail because leaders avoid exploring beyond obvious solutions. This form of shortsighted leadership focuses on the norm and frequently fails to embrace solutions outside of normal standards. Hall reports exploring the obvious solutions prior to implementing organizational change remains ineffective since the scope of a project may fail to take into account economic and societal transformations. According to Heifetz, Grashow, and Linsky (2009), executives of Cambridge Leadership Associates, managers of some organizations are just beginning to take note of the permanent crisis in today's economy. Short-term change initiatives like employee reduction fail because of the lack of sustaining power required to maintain a competitive advantage.

Economic complexity, employee and leader apathy, fear, change phases, and leadership are examples of variables impacting an organization's ability to implement change. Additionally, the speed and complexity of change in the workplace often require management to guide employees through emotional and behavior modifications. Unfortunately, some leaders identify ineffective change efforts and remain unsupportive of the strategic vision of the organization. Beerel (2009) suggests others are unable to recognize the "*new realities*" occurring as change happens rapidly. Leaders may tend to ignore unpleasant situations difficult to understand or deemed irrelevant. Finally, leaders misrepresenting change initiatives result in failure due to a desire to support individual platforms or agendas.

According to Burnes (2004) and Haley (2007), many errors, barriers, and obstacles prevent managers from encouraging individual front line employees to adopt improvement initiatives. Kotter's (1995) work provides eight errors that prohibit transformation from taking place in many organizations. Kotter's primary error includes "not establishing a great enough sense of urgency" (p. 60). Kotter reports other errors: 1) not creating a powerful enough guiding coalition; 2) lacking a vision; 3) under-communicating the vision by a factor of ten; 4) not removing obstacles to the new vision; 5) not systematically planning for and creating short-term wins; 6) declaring victory too soon; and 7) not anchoring change in the corporation's culture.

Burnes (2004) and Haley (2007) discuss the work of Huczynski and Buchannan (2001) which suggests several barriers to organizational change. One of the barriers listed in this work as contributing to organizational change failure includes communication. In a study of 531 organizations undergoing change initiatives, chief

executive officers (CEOs) agreed that given the opportunity to implement change differently, they would alter the methodology used to communicate with employees (Appelbaum & Wohl, 2000). Instead of implicitly defining change, benefits, and individual and organization roles and responsibilities, explicit overall expectations are needed. Bernerth (2004) contends setting a positive momentum for rapid change in the workplace lies in the communication message shared with members of the organization.

Coch and French (1948), pioneer researchers of change, suggest managers must effectively communicate the need for change and actively engage individuals in the process in order to avoid resistance. Effective communication remains crucial since an individual employee's ability to process change varies. Clear and concise communication of the organization's vision allows the workforce to connect the present state with the desired state of employee behavior.

Lack of communication allows employees to make assumptions and fill in missing information with inadequate data. This uninformed behavior often contributes to unsuccessful change efforts. Weber and Weber (2001) suggest truthful communication and collaboration as an essential foundation for achieving successful organizational change. Lack of understanding of the change, uncertainty of the roadmap, and misunderstanding of the organization's strategic goals may result in a collapse in the process. Haley (2007) supports the findings and agrees that change fails for many reasons such as lack of change readiness, failure of leadership, ineffective communication, insufficient planning, and failure to achieve and sustain organizational learning.

According to Curtis and White (2002), resistance remains a factor complicating the change process and often results in unproductive activities within an organization. Appelbaum and Wohl (2000) report the importance of anticipating resistance when implementing change. Burnes (2004) suggests that most resistance represents a failure in management to prepare individuals for change. Readiness is at the opposite end of the spectrum from resistance when determining strategies that successfully support the workforce through change.

Change Readiness

Researchers indicate a vast array of recommendations for managing successful change. The results of a study conducted by Weber and Weber (2001) imply planned readiness for change minimizes the resistance to change. Planned readiness also provides an avenue to manage transformation. Despite the opportunities and threats surrounding rapid organizational change, considerable research exists to ensure overall success. As previously mentioned, Coch and French (1948) propose the intent of American industry is to change processes as often as the competition mandates. Today, researchers such as Bernerth (2004) and Haley (2007) concur with Coch and French (1948) that resistance to change may be offset by implementing proactive interventions prior to change initiatives. Bernerth reports that businesses leading in the number of successful changes embrace readiness prior to actual implementation.

Bernerth (2004) defines readiness “as the state of mind reflecting a willingness or receptiveness to changing the way one thinks” (p. 39). Holt, Armenakis, Field and Harris (2007) further define readiness for change as the individual’s beliefs, attitudes, and intentions to implement proposed change. Based on studies conducted by pioneers such

as Lewin (1947) and Coch and French (1948), the researchers propose that readiness is a cognitive precursor behavior of resistance to or acceptance by individuals to implement organizational change. Armenakis et al. (1993) contends that there should be a clear distinction between resistance and readiness. Readiness provides an avenue for leaders to proactively champion organizational change. The change readiness model proposed by Armenakis et al. (1993) offers change agents a roadmap to aggressively engage, energize, and support employees through rapid change. According to Armenakis et al. (1993) the internal pulse of the organization becomes transformative. During this period of readiness, and prior to implementation, the work of the leader is inspiring the workforce and not strictly monitoring resistance. Rock (2007) also offers that readiness “paves the way to change transformation” (p. 18).

Weiner, Amick and Lee (2008) support Holt et al.’s (2007) suggestion which indicates that readiness is a precursor to resistance and notes it is critical to the management of successful change. Weiner et al. (2008) defines organizational readiness as “the extent to which organizational members are psychologically and behaviorally prepared to implement organizational change” (p. 381). Long-term success of organizational change can be linked to creating complete awareness for change, an implication of the organization’s ability to change and the individual’s perceived benefit (Armenakis & Harris, 2002; Cunningham et al., 2002; Eby et al., 2000; Wittenstein, 2008).

According to Smith (as cited by Haley, 2007), Kotter’s eight-step process of creating major organizational change serves as a substantial contribution to change readiness and the management of successful transformation. Wittenstein (2008) refers to

change readiness as a mediating variable between the organization's change strategies and successful implementation of the initiative. Kotter's eight steps for creating major change include: 1) establishing a sense of urgency; 2) creating the guiding coalition; 3) developing a vision and strategy; 4) communicating the change vision; 5) empowering broad-based vision, generating short-term wins; 6) generating short-term wins; 7) consolidating gains and producing more change; and 8) anchoring new approaches in the culture. Kotter (1996a) suggests the model evokes successful change because major transformation does not happen easily. When applied appropriately, the steps ensure that major transformation is not diluted. Major organizational change initiatives normally require smaller projects occurring over an extended period of time (Kotter, 1996a).

According to Kotter (1996a), creating a sense of urgency is the most vital step to successfully moving change forward and coaxing individual employees to work together. A sense of urgency establishes awareness, contributes to the momentum, and establishes the commitment needed to sustain the project through various stages. The results of a study conducted by Jones, Jimmieson, and Griffiths (2005) in a government agency prior to implementing a new computer system suggest a direct relationship between the individual employee's perception of the organization's culture on human relations and readiness for change. Jones et al. (2005) discovered employees' readiness for change was related to overall use of the new computer system. Smith (2005) suggests creating a sense of urgency around the need to achieve change is an attempt to successfully manage the "people side of organizational change" (p. 154). Smith also suggests "successful organizational change is achieved through people" (p. 154). Like Lewin (1947), Kotter attests change is a process beginning with changing the status quo.

Like Armenakis et al. (1993), Schaffer and Thomson (2000) assert that management of successful change begins with results. Result-driven change initiatives have a greater potential for success because they aim to accomplish definitive measurable goals. Result-driven change initiatives present opportunities for early detection of what is working and what is not. This methodology allows for modifications during various stages of implementation of change initiatives (Appelbaum & Whol, 2000).

Managing successful changes requires readiness (Pascale & Millernamm, 1997; Schaffer & Thomson, 2000). Pascale and Millernamm argue that managing success requires taking the vital signs of the organization. Taking an organization's vital signs examines the intensity and effect the change has on the overall stability of the company. High organizational vigor requires a large number of the workforce to be concerned about the company's ability to maintain a competitive advantage in a rapidly changing economic market. Pascale and Millernamm (1997) recommend changing the way change is implemented. In altering the way change initiatives are implemented, the workforce must be competent and actively engaged in the change transformation. Members of the workforce must understand the company's strategic goals as they align with change initiatives and the overall vision of the organization. Successful strategic change initiatives require a systematic framework, which allow individuals to eagerly support transformation along all boundaries. This systematic process mandates a skilled workforce contribute to the change, to the commitment, and to consistent motivation. Smith (2005) argues change readiness is not automatic and organizational leaders cannot assume people within the organization support the transformation. It is beneficial for companies to develop change readiness strategies for individual employees as well as for

the organization. This upfront investment is significant in the overall reduction of resistance.

Study results on organizational change and readiness for change include many factors. The results include external, internal, individual, and group factors of change readiness. However, according to Wittenstein (2008), collectively the factors of change readiness are significantly difficult to comprehend and do not always provide a clear understanding of what influences an individual's readiness for change. The next section provides an overview of studies identifying change readiness factors.

Change Readiness Factors

Researchers agree change readiness is critical to effective and efficient organizational transformation. Readiness factors and variables have been identified by researchers such as Eby et al. (2000), Weber and Weber, (2001), and Armenakis and Harris (2002), as sources that influence readiness and ultimately impact successful implementation of organizational change. Table 2 provides an overview of major change readiness literary reviews and studies. Numerous factors can impact organizational change. Factors include communication, leadership, culture, perception, employee empowerment, social work group relations, trust, and organization identity (Haley, 2007; Wittenstein, 2008). According to Wittenstein (2008) “an important observation to made is that there appears to be consistency in the identification of major type of factors that have an impact: a combination of individual and organizational characteristics” (p. 49).

Table 2

Summary of Change Readiness Reviews and Studies

Author/s	Purpose of Study	Factors
Eby, Adams, Russell, and Garby (2000)	Examines related employee perception or organizational readiness for change.	Employee perception Self-efficacy Trust in peers Participation Flexible policies and procedures
Beer and Nohria (2000)	Compares theories of change.	Goals/Culture Economic value Listening/communication Learning Speed of response Leadership Focus Process Rewards External consultants
Weber and Weber (2001)	Explores employee perception of organizational readiness for change during a planned organizational change effort.	Trust in management Employee support Encouragement and rewards Perception of organizational readiness Environment conducive to innovation Feedback Autonomy Participation Goal Clarity
Cunningham, Woodard, Shannon, MacIntosh, Lendrum, Rosenbloom, and Brown		Family demographics Job insecurity Job interference Self-efficacy Job change self-efficacy Active problem-solving Job demands Active vs. passive job

Table 2 (continued).

Authors	Purpose of Study	Factors
Armenakis and Harris (2002)	Explains how change message components (change communication model) created readiness for a major reorganization.	Social support Organization/staff relations Service quality Readiness for change Discrepancy Efficacy Appropriateness Principal support Personal valence Persuasive communication Management of information
Bernerth (2004)	Provides theoretical foundation for the Armenakis, Harris, and Field five-message component model of organizational readiness.	Discrepancy Self-efficacy Principal support Discrepancy and appropriateness Personal valence
Rafferty and Simons (2006)	Examines employee readiness for fine-tuning changes and corporate transformation changes.	Participation Self-efficacy Trust Organizational support
Fernandez and Rainey (2006)	Identifies points of consensus among researcher concerning organization transformation and organizational change theory.	Need for change Action or strategy Internal support Top management support (leadership) External support Resources Institutionalize Pursue competencies

Table 2 (continued).

Authors	Purpose of Study	Factors
Holt, Helfrick, Hall and Weiner	Determines how health professionals may comprehensively conceptualize readiness for change.	Psychological Structural Appropriateness Principal support Change efficacy Personal valance Collective commitment Collective efficacy
Jimmieson, Peach, and White (2008)	Utilizes the theory of planned behavior to inform management of the intention of employees to support change.	Communication Participation Person/Employee support Perception
Walinga (2008)	Describes and constructs a model of performance readiness.	Social Economic Political Competitive
Haley (2007)	Develops readiness strategies to support IT support through rapid change.	Open communication Multiple methods of communication Visible leadership Trustworthy leadership Employee participation Anchoring of strategies in culture

Eby et al. (2000) identify employee perception as one of the most important factors in understanding resistance to large-scale transformation. Like Armenakis et al. (1993), Eby et al. suggest employee perception is the cognitive behavior that determines resistance or adoption of change interventions. However, Eby et al. (2000) contend

Armenakis et al.'s study does not include variables of employee perception that impact the organization's ability to implement change successfully.

Eby et al. (2000) elaborate by confirming organizations are made of systems and sub-systems specific to organizational hierarchies of various entities, departments, affiliates, and collaborations. The changes within systems and sub-systems involve acquiring additional firms, partnering with other companies that provide additional resources, eliminating product lines, and redesigning services and support. A state of constant flux is necessary for organizations to compete in a very complex market. Constant flux continues causing employees to make their own assumptions about the interventions and climate within perspective organizations.

The study by Eby et al. (2000) includes three variables to understand employee perception as it relates to organizational readiness for change: 1) individual attitudes and preferences; 2) work group and job attitudes; and 3) contextual variables. The study was conducted within two divisions of a large national sales organization. The two divisions were selected because of the propensity to participate in complex change initiatives. The results of the study suggest that, when determining an organization's readiness for change, one must examine factors supporting change and factors that relate to specific types of change. Some of the variables influencing an individual employee's perception to change include trust in peers, participation, and flexibility in policies and procedures.

Another change readiness study conducted by researchers Beer and Nohria (2002) compares two theories of change in two distinct organizations to develop strategies to radically transform the way business changes. The theories are Theory E and Theory O (see Table 3).

Table 3
Comparing Theories of Change

Dimension of change	Theory E	Theory O	Theories E and O combined
Goals	Maximize shareholder value	Develop organizational capabilities	Explicitly embrace the paradox between economic value and organizational capability
Leadership	Manage change from the top down	Encourage participation from the bottom up	Set direction from the top and engage the people below
Process	Plan and establish programs	Experiment and evolve	Plan and spontaneity
Reward System	Motivate through financial incentives	Motivate through commitment-use pay as fair exchange	Use incentives to reinforce change but not to drive it
Use of consultants	Consultants analyze problems and shape solutions	Consultants support management in shaping their own solutions	Consultants are expert resources who empower employees

Source: Beer and Nohria 200, p. 17

Change emphasizing economic value and positive returns for shareholders is accomplished when the characteristics of Theory E are applied. This approach is often referred to as the hard approach because it involves drastic modification to workforce in the form of layoffs and numerous employee changes. The theory measures successful

change solely by the economic benefits provided to the stakeholders. Theory O is a softer approach, focusing on “developing corporate culture and human capability, patiently building trust and emotional commitment to the company through teamwork and communication” (p. 14). The change readiness factors explored in the 2002 study are goals, leadership, focus, process, rewards, and consultants. Change readiness factors, referred to as dimensions of change in Table 2, outlines the difference between Theory E and O. The model exemplifies what a combined theory approach would look like. Beer and Nohria’s review of change readiness factors and the application of the characteristics of Theories E and O applied in one of the two companies confirm that careful combination of both theory strategies can enhance successful implementation of organizational change.

In a study conducted by Weber and Weber (2001), a number of factors were also tested to determine the impact of readiness on change. The study explored employee perceptions of organizational readiness for change during a planned organizational change effort. The results indicate variables such as trust in management, work environments conducive to innovation, perception of supervisory support, and impact of individual readiness for change (Weber & Weber, 2001).

Similarly, Cunningham et al. (2002) explore internal and external factors influencing individual and group readiness. The factors examined were specific to change readiness in healthcare organizations. The study examined factors such as self-efficacy, active problem solving, and participation. The results reveal that employees with higher readiness scores participated in the decision making process and contributed to the organization’s change initiative.

A one-year study conducted at a large Canadian healthcare facility specifies that readiness for change was best predicted when combining group and individual factors. The results of this study align with the idea that individuals in active jobs experience higher levels of readiness. Employees in active jobs are highly skilled, participate in decision making processes, and report directly to senior leaders or have access to senior leaders. In these instances, employees perceive they are in control of their behavior and process the ability to perform specific tasks. Participants of the study were confident in their aptitude to contribute to quality and performance improvements. Therefore, the participants reported higher levels of change readiness for organizational change (Cunningham et al., 2002).

Armenakis et al.'s (1993) study of change readiness factors and variables explores change message components which created readiness in a major organization. Armenakis and Harris (2002) and Lewin (1947) propose that change generally occurs in three phases. Armenakis' et al. three phases include readiness, adoption, and institutionalization. In the first phase, readiness, the individual employees become prepared for change. During phase two, adoption, the change is implemented and employees adopt the new behaviors. In the third and final phase, institutionalization, efforts are made to manage the change until it becomes the norm and is anchored within the culture. Armenakis and Harris (2002) use the Mobius strip to illustrate that the three phases overlap as the change process continues to evolve. The Mobius "strip clearly shows that the phases of change overlap and that the whole process is continuous as institutionalized changes themselves become the focus of future change efforts" (p. 169). During the transformation process, the change message is used to organize the three

phases and to create readiness and momentum for an intervention (Armenakis & Harris, 2002).

The change message serves as the primary venue for organizing the three phases and creating readiness for a change initiative. The Armenakis et al. (1993) change readiness model has five key message components: 1) discrepancy; 2) efficacy; 3) appropriateness; 4) principal support; and 5) personal valence. These five components are factors of the change message that impact human capital positively by conceptualizing readiness.

The first component of change is discrepancy, an intricate component of the message, because it clearly identifies the need for change. During this component of the change message, details of the gap analysis are provided to note the difference between the current performance and the desired outcome. An individual may see that something is wrong and that a change is warranted.

Efficacy has to do with the employee having the confidence to succeed (Armenakis & Harris, 2002). Walinga (2008) concurs with Armenakis and Harris (2002) and suggests the individual must be confident in the midst of change in spite of the intervention. This concept is consistent with Vroom's (1964) expectancy theory of motivation. Vroom's theory of motivation, like efficacy, is "the force impelling a person to perform a particular action, as determined by the interaction of the person's expectancy that his act will be followed by a particular outcome" (Lawler & Suttle, 1973, p. 482).

The change message should convince others that change is appropriate. If the individual accepts the need for change but opposes the specifics, resistance is likely to occur. Appropriateness confirms there is a need for change and the individual agrees

with the specifics. The fourth component of the change message, principal support, requires resources and commitment to facilitate change and to ensure it becomes the norm (Armenakis & Harris, 2002).

Personal valence is the final component of the change message. During organizational change, employees analyze the positive and negative outcomes related to the change. Personal valence confirms the change was beneficial to the employee (Holt et al., 2007). The core of the readiness framework is the change message (Armenakis & Harris, 2002; Bernerth, 2004; Haley, 2007). Bernerth contends the change message and its five components are the avenue for readiness for change which consequently improves the overall ability to successfully manage rapid change (2004).

Poor outcomes and a number of unfavorable employee responses are attributed to the “oversight of the importance of communicating a consistent change message” (Armenakis & Harris 2002, p. 169). The actual messages provide details about the change and determine individual responses to the intervention (Armenakis & Harris 2002; Bernerth, 2004; Haley, 2007; Kotter, 2000, 2007). Communication is the “primary mechanism for creating readiness for change among organizational members” (Bernerth, 2004, p. 41).

Although many individual and team factors influence change readiness, Rafferty and Simon (2006) focus on participation, self-efficacy, trust, and organizational support. Rafferty and Simon’s focal point is employee readiness for fine-tuning changes and corporate transformation. Unlike theoretical researchers such as Eby et al. (2000) and Weber and Weber (2001), Rafferty and Simon (2006) declare “participation in change was not significantly or uniquely associated with readiness for corporate transformation

change” (p. 347). Trust of senior leaders and self-efficacy are the strongest drivers for readiness in corporate transformation.

Unlike Rafferty and Simon (2006) whose study results indicate participation is not always important, Fernandez and Rainey (2006) argue that participation is a strong driving factor and a necessary component of change readiness. Fernandez and Rainey’s (2006) interest resides in government management, leadership, and organizational change in the public sector. The researchers’ review of literature focused on organizational change theory and confirmed that change is complex and very challenging, particularly for leaders in the public sector. Fernandez and Rainey’s (2006) assessment of organizational change strongly suggests that managerial leaders must build internal support through widespread employee and stakeholder participation. Employee and stakeholder internal support are accomplished through change readiness in the format of planning, awareness, and a sense of urgency.

Moreover, some theorists “downplay the significance of human agency as a source of change” (Fernandez & Rainey, 2006, p. 68). Despite the vast differences concerning organizational transformation and change, Fernandez and Rainey note there is a consensus that human agencies, leaders, and participants should pay special attention to eight change readiness and preparation factors that impact successful organizational change: 1) need for change; 2) action or strategy; 3) internal support; 4) top management support; 5) external support; 6) resources; 7) institutionalization; and 8) pursuit competencies. The factors serve as change readiness activities that prepare the individual employee and stakeholder for participation in successful management of organizational change initiatives.

A study conducted by Beer, Eisenstat, and Spector (1990) offers another perspective concerning the utilization of change strategies to manage competitive realities. A four-year study of organizational change at six large corporations reveals that company-wide change readiness programs delivered by corporate groups did not necessarily result in organizational change. Throughout the study the researcher discovered “while in some companies wave after wave of programs rolled across the landscape with little positive impact, in others, more successful transformations did take place” (p. 16). The results indicate that the initiative to revitalize the corporate culture and programs implemented to enhance employee knowledge are capable of adding value to an intervention but do not always serve as a driving force for successful change.

Researchers suggest effective change strategies must challenge change agents during corporate renewal to incorporate three change factors referred to as critical path: 1) commitment; 2) coordination; and 3) competence. These factors are essential for creating a momentum for change. Commitment helps individual employees share organizational issues and plan for improvement. A shared vision assists with the coordination of new roles and responsibilities and the assignment of tasks to manage for competitiveness. Competence provides the workforce with knowledge and skills needed to foster employee participation (Beer et al., 1990). Additionally, a later study conducted by Beer and Nohria (2000) also suggests the change readiness factor of participation, “was the hallmark of change” (Beer & Nohria 2000, p. 17).

In 2008, Holt et al. explore change readiness factors manipulating successful change in healthcare organizations. Holt et al. (2008) agree with other researchers such as Fernandez and Rainey (2006) and Beer et al. (1990) by defining readiness as the

degree by which “those involved are individually and collectively primed, motivated and technically capable of executing the change” (p. 50). However, when measuring readiness for change among individual healthcare professionals, Holt et al. suggest the importance of the evaluation of psychological factors, structural factors, and the level of analysis. The psychological factors include the characteristics of the individual engaging in the change. The circumstances under which the change is occurring encompass the structural factors while the level of analysis identifies individual and organizational change. The psychological, structural, and level of analysis reflect the organization and its workforce’s commitment to change. Despite the various levels available for measuring readiness, change presents a vast amount of challenges.

Leaders of healthcare delivery systems remain perplexed by the challenges of implementing change. Healthcare organizations are complex, integrated systems supported by a multitude of specialized professionals. Adding to the complexity of change in healthcare organizations, an initiative can require multiple interventions to accomplish the change throughout the integrated delivery system. Researchers concur that change readiness in healthcare systems is a complex, multi-dimensional construct that occurs at both the individual and organizational level. Thus, asserting “that the structural and psychological factors should be considered at multiple levels” (Holt et al., 2008, pp. 344-345).

The theory of planned behavior (TPB) also considers the structural and psychological factors of the individual employee during change initiatives. The theory of planned behavior acknowledges the value of the individual employee during organizational change (Ajzen, 1991). Jimmieson et al. (2008) use the theory of planned

behavior to understand the individual employee's intentions to support organizational change or "readiness to engage in, activities that support a change initiative" (p. c1). Jimmieson et al. (2008) suggest knowledge and attitudes of individual employees engaged in supporting change can result in successful implementation of change initiatives. The TPB theoretical framework also provides information that explains why the implementation of communication and participation strategies is likely to promote change readiness for organizational change. Ajzen (1991) contends that the theory of planned behavior is "designed to predict and explain human behavior in specific context" (p. 178). The central factor of the theory of planned behavior is the individual's intentions, motivated by one's overall willingness to adhere to specific behavior.

Jimmieson et al. (2008) also stress that optimistic intentions and employee perceived control over a performing behavior provide favorable conditions to support organizational transformation. The results of the study conducted by Jimmieson et al. indicate that the theory of planned behavior is useful for measuring readiness for change. This framework provides organizational leaders with the employee's intention to resist or to support change prior to the actual change intervention.

Walinga (2008) also seeks to determine favorable conditions to support organizational transformation. The 2008 study identifies "the principle component of a successful transformational change and in doing so, to gain insight into the process by which a state of change readiness might be achieved within an organizational setting" (p. 316). Walinga (2008) appraises that it is significant to understand the change readiness factors driving organizational change that ultimately lead to the need for individual change. Some of the external contextual factors impacting internal organizational change

are social, economic, political and are competitive in nature. It is also imperative to identify gaps between the current organizational performance and the organization's strategic goals (Walinga, 2008). This information attempts to provide a clear understanding for the individual employee and a roadmap for the organizational leaders during change initiatives.

The next section focuses specifically on roles communication, leadership, and culture play during change implementation. Haley (2007) suggests embedding change readiness strategies during rapid change as critical to “achieving successful and persisting change” (p. 110). Haley's (2007) study conducted in a Canadian healthcare conglomerate clearly recommends embedding the following practices when implementing change:

1. Multiple methods of communication concerning the change. The communication message should be timely, relevant, and convey ‘*why*’ the change is necessary.
2. Open communication, allowing two-way communication among all parties. Opening communication provides an avenue for information sharing, persuasion, conflict resolution, listening, and collaboration.
3. Visible and accessible leadership. Individual employees highlight the need to see leaders “walk the talk” (p.114). Employees express the need to have visible support from leaders at all levels of the organization during organizational change.

4. Leadership team whom staff can trust. Employees want to feel safe participating and being engaged with leadership during the implementation of change.
5. Culture anchoring behavior of genuine participation. Employees note the significance of a culture that promotes genuine participation to provide input and receive timely feedback.
6. Culture encouraging individual change readiness that results in successful implementation of change. Implementation of change initiative would require change planning, adequate resources, and anchoring the philosophy of change readiness.

A participant of Haley's study noted the use of these six strategies should result in "a certain level of transparencies about where you're going and why you're going, which then translates to a certain level of trust, that people understand what it is that you are trying to accomplish" (p. 110). According to Haley (2007), these factors are necessary to enhance individual employees' readiness for change.

The result of change readiness studies confirms organizational change is difficult and remains complex. The results also indicate countless factor and variables serve as predictors of change readiness. However, there appears to be some uniformity in the identification of major factors (Wittenstein, 2008). A number of researchers suggest the core factors of readiness for change include communication, leadership, and culture (Lewin, 1947; Armenakis et al., 1993; Haley, 2007; Walinga, 2008; Wittenstein, 2008).

Communication

To understand the individual employee's intention to support organizational change in the context of readiness, it is imperative to review literature directly related to communication during organizational transformation. In change management studies, communication is often distinguished as a factor significantly impacting change programs. Communication is often referenced as a major contributor to successful organizational transformation. Yet, researchers have discovered that communicating during change is very difficult (Armenakis & Fredenberger, 1997; Fraham & Brown, 2005; Laschinger, Gilbert, Smith, & Leslie, 2010).

Richardson and Denton (1996) imply that many attempts to implement change fail and are directly related to communication. A research study conducted by Smeltzer (as cited by Richardson and Denton, 1996) in 43 organizations highlights the importance of communication during change. The results were consistent across the target audience. Researchers discovered the universal reason for failure of change was negative rumors. The negative rumors were prevalent during rapid transformation because change agents lacked the ability to provide individual employees with a venue for open and timely communication. Change agents in participating organizations used lean communication techniques such as memos rather than face-to-face structured dialogue.

In a similar study, structured dialogue was used in a large healthcare system in the Midwest to help 16,000 employees conceptualize the need for rapid change and new organizational strategic objectives (Larson, 2007). Individuals selected to champion the initiative were available to guide and support the workforce through the process. The motto for the structured dialogue sessions was, "learning does not occur unless you hear

yourself” (p. 24). The organizational leadership created an environment that allowed individual employees to have access to information, support, and organizational resources. The individual employees of this large conglomerate were empowered and given the freedom to participate in the change to the extent they were comfortable.

Laschinger et al. (2010) also reviewed the aspects of communication when studying the components of Kanter’s (1977) structural empowerment theory. Access to information and communication lay at the center of Kanter’s study. According to Laschinger’s et al., an employee involved in change is powerless without access to appropriate information. Conceptually, Kanter’s structural empowerment theory indicates that an individual employee’s structure of power evolves around readily accessible information. The mobilization of employees to perform specific tasks during change is restricted without effective use of communication venues. The types of communication needed for successful implementation of change interventions vary. Open communication and shared information are essential for employee empowerment during change.

Communication strategies are vital to keeping the workforce engaged and providing a venue for managing rapid change. Turnaround change agents (TCA), who participated in an investigation of 145 businesses, assert successful organizational transformation is dependent on the individual members of the workforce. Despite the distinctive roles of the people in organizational transformation, many of the agents propose that leaders of change overlook the human element. Therefore, it is critical to establish processes that include communication methods for successful change implementation (Armenakis & Fredenberger, 1997).

Armenakis and Fredenberger (1997) offer three readiness communication strategies as 1) persuasive communication methods; 2) the use of external sources of information; and 3) active participation. Persuasive communication is used to inform employees of the need for change, to share that it will occur rapidly, and to enlighten the workforce to possibilities. Although many persuasive communication methods exist, face-to-face dialogue is considered most effective. In-person sessions can be effective because individual employees are able to clarify information and obtain immediate feedback. However, other persuasive communication methods such as written memos and electronic messages are also valuable. Today, change agents use multi-persuasive communication methods such as email, posting of memos, and personal employee letters to interact with the workforce during rapid change intervention.

External sources of information may be used in readiness messages to solidify the need for change. For instance Armenakis and Fredenberger (1997) referenced a change readiness message delivered to the workforce of Whirlpool. During the 1980s, Whirlpool began a long-term initiative to improve the organization's competitive advantage in a very turbulent market. The contextual factors impeding the market were fierce competition, consolidation of many appliance companies, and new foreign entrants into a saturated market. The communication message presented to the Whirlpool workforce to build individual readiness for change consisted of both the discrepancy and the efficacy components.

The discrepancy component of the message informed employees that the competition in the appliance industry was substantial and that sustainability in a changing market would mandate innovation, aggressiveness, awareness of market conditions while

becoming a global player (Armenakis et al., 1993). The efficacy component involved sending individual employees to Japan and Korea to observe the operations of other organizations successfully implementing change initiatives resulting in positive outcomes. The visit to successful model manufacturing operations assured the individual employees that “Whirlpool could make the fundamental changes and prosper in the changing environment” (p. 694). The overall experience resulted in assuring the Whirlpool workforce this change could be successfully implemented. Therefore, eliminating the discrepancy or misgivings the employees were internalizing.

The leaders of Whirlpool created a change message for employees that included information from a study conducted by a highly respectable consultant firm. The message from the consultant firm helped Whirlpool employees to visualize the opportunities that the strategic change offered the organization. Other external contextual factors such as economic, social, political, and competitive environments may be referenced in change messages for positive results (Armenakis et al., 1993).

Traditionally, employee participation in change can be costly and time consuming but considered critical to organizational transformation. Self-discovery of the readiness message is empowering for the individual employee and can make the message believable (Armenakis & Fredenberger, 1997). Therefore, participating in organizational change creates an environment for learning and attempts to circumvent resistance.

Appelbaum and Wohl (2000) affirm that building a change process necessitates “communications and more communication” (p. 295). The communication strategy is a methodology framework that allows senior executives to confer with individual employees about strategic goals in addition to the value the workforce collectively

contributes to the organization. The venue allows committed executives to monitor the behavior and action of change agents to ensure the actions coincide with the message of the organization. Eight communication prescriptions for change are shared from an Ontario hospital:

- Build commitment from the top: senior executives must make communication a priority. The message ought to be open, honest, timely, and credible.
- Layer the organization with your messages: the message for change should penetrate the organization at all levels.
- Build milestones for participation consultation at every step of the process: provide many opportunities for employees, physicians, volunteers, and other participants to share ideas and concerns during the change process.
- Demonstrate passion for your message: demonstrate excitement and enthusiasm regarding the message.
- Ensure that communication becomes everyone's responsibility: development of organizational strategies that reward employees at every level for effective communication.
- Leverage the power and credibility of your management team: ensure that middle management has the time and resources to convey the ongoing communication message to the workforce.
- Build a strong bridge between human resources and communication: this strong bridge should be a clearly defined partnership.

- Communicate as much as you can and then go back and do it again: use the full range of tools and resources for continuous communication. (Appelbaum & Wohl, 2000 p. 295)

Effective communication unites the past and present with the vision for the future for employees. Clear and concise dialogue provides a venue to understand the distinct role of the individual employee and the value that one contributes to the change intervention (Appelbaum & Wohl, 2000). According to Armenakis et al. (1993), the change message should have two components: the need for change and the individual and collective efficacy.

As previously mentioned Armenakis et al. (1993) recommend that the discrepancy component of the message communicates the need for change. The need for change is the gap between the organization's current and future state. However, despite the need for change, the individual employee must trust that the intervention is appropriate for the organization and perceive the ability to change. Gaining commitment from the individual employee for the future necessitates clarity from organizational leaders about the current state. Surviving and maintaining competitive advantage in turbulent markets are rarely debatable although other reasons for change may be disrupted.

While it is often clear that a discrepancy exists, Armenakis et al. (1993) propose that resistance to change can still occur if the individual is not confident that he has the capability and leadership support to prevail over the discrepancy. Despite the success of organizations such as Whirlpool, change remains difficult and requires multiple methods

of open communication. Successful implementation of change also requires leadership support (Appelbaum & Wohl, 2000; Haley, 2007).

Leadership

The extensive exploration of the individual employee's perception of change readiness during organizational change requires a review of change literature that centers on leadership. For centuries researchers have been obsessed with leadership and the characteristics of an effective leader. Leadership has been studied more than "almost any other aspect of human behavior" (Higgs, 2002, p. 3). Hogan, Curphy, and Hogan (1994) contend that volumes of articles, dissertations, books, and presentations appear on the topic of leadership each year.

Change leadership is an intricate facet of successful implementation of organizational change. There are "almost as many definitions of leadership as there are people who attempt to define the construct" (Haley, 2007, p. 40). Individual employees rely on leaders and their leadership skills to provide them with a process for self-awareness, empowerment, and purpose, especially during change.

In 1999 alone, over 2,000 books were published on leadership (Higgs, 2002). However, despite the number of printed pages concerning leadership, many researchers propose that leadership is paradoxical and there remains a scarcity of knowledge identifying the characteristics of an effective leader (Gilmore, 1990; Higgs, 2002). Therefore, exploring the various aspects of leadership in the context of organizational change helps one to understand the impact leadership has on individual change readiness.

The evolution of leadership over the last two decades seems directly related to economic conditions within various industries. The endless factors driving change has

organizations in a continuous state of flux (Gilmore, 1990). Multiple challenges are faced by leaders including the following:

- Information age – with this shift, the need for machines, factories, and capital declined while it became critical to have “intangible assets such as proprietary networks, brands, intellectual capital, and talent (p. 3).
- Intensifying demand for high-caliber managerial talent – the job of leader has become very challenging as globalization, deregulation, and rapid changes in technology become more prevalent in many industries. In the meantime, there continues to be a limited number of leaders with the knowledge, skills and ability to lead in the 21st century. A war for talent research of various organizations reveals that only 20% of leaders agreed they had the leadership talent needed to engage in their companies’ business opportunities.
- Growing propensity to switch companies – in the 21st century many leaders have become “passive job seekers” (p. 6). These leaders, as well as their perspective workforce, are continuously looking for greater opportunities (Michaels, Handfield-Jones, & Axelrod, 2001).

Researchers propose “downsizing and re-engineering of organizations, in effect destroyed the existing psychological contract which offered job security in return for loyalty, obedience and commitment” (Higgs, 2002, p. 4). Voiding the existing psychological contract creates a workforce that is mobile and less loyal. The mobility of today’s workforce requires organizations to monitor the availability of individual talent needed to remain competitive in a very turbulent market. In the early 1900s, only 17% of jobs required knowledge-based employees. Today, more than 60% of the jobs require

knowledge-based workers (Michaels et al., 2001). The war on talent continues to prevail as well as the percentage of knowledge-based workers needed in various industries. Therefore, leaders are forced to seek alternate methods to engage employees and secure commitment (Higgs, 2002).

Leadership is a term that is very vague and difficult to define. Understanding leadership requires reflecting on whether conceptually leadership is being associated with a “position within a hierarchy or the behaviors of those with responsibility for a group of people within an organization. Leadership is like beauty; it’s hard to define, but you know it when you see it” (Higgs, 2002, p. 6). Perhaps the simplest definition of leadership, as provided by Kouzes and Posner, is a relationship. This relationship occurs between those who lead and those who are inspired to follow (Haley, 2007). Banutu-Gomez and Banutu-Gomez (2007) provide a similar definition by suggesting that “the leaders’ internal, external, and relational context of behavior connect with the followers’ own sense of internal motivation” (p. 70). The individual employee senses the leaders understanding and encouragement as he or she is assisted with employee development and sharing of power. Leaders attract individuals within the workforce who are motivated, encouraged to adopt new ways of thinking, and empowered to participate in change initiatives. The primary task of “leadership is to establish and maintain intimacy” (Banutu-Gomez & Banutu-Gomez, 2007, p. 70). This type of behavior can only occur through close social relationships.

Hogan et al. (2001) suggest that “leadership involves persuading other people to set aside for a period of time their individual concerns to pursue a common goal that is important for the responsibilities and welfare of a group” (p. 3). According to Hogan et

al., (2001) leadership is defined as having the ability to “build and maintain an effective team” (p. 40). That team must be able to exceed the performance of their competition. Additionally, they must be able to advocate leadership as an act of persuasion. Domination and the intent to overpower members of a group are not linked to effective leadership. Leaders who expect individuals to behave in a particular manner solely because of their role or authority are not leaders (Hogan et al., 2001).

Reynolds and Warfield (2009) suggest that leaders are “those who have the desire and willpower to be effective, and learn what true leadership is, and is not” (p. 62). They further assert traditionally the terms leadership and management are used interchangeably in meaning and application. According to Haley (2007) “this confusion has also resulted from other imprecise terms like management, authority, and supervision being used interchangeably with leadership” (p. 40).

However, Reynolds and Warfield (2009) mention a distinct difference between leaders and managers with each requiring different skill sets during change. Leaders are innovators responsible for asking what and why. They are focused on people. Leaders’ interests are in development, challenging the status quo and establishing a climate for change participants to reach their highest potential (Reynolds and Warfield, 2009).

Thousands of stories of exceptional leadership during change initiatives were collected during a study conducted by Kouzes and Posner from leaders in various venues (Reynolds & Warfield, 2009). The research identified four characteristics of an exemplary leader: honest, forward-looking, inspiring, and competent. The study concludes that exemplary leaders must be credible and clear about beliefs. Yet, despite the differences in leadership styles, the study reveals similar patterns of behavior.

According to the individuals who participated in the study, effective leaders demonstrated specific patterns of behavior:

- Modeling the way by creating standards of excellence then setting an example for others to follow. Leaders establish guiding principles that clearly define how people should be treated and how strategic goals should be pursued. These individuals create opportunities for victory.
- Inspiring a shared vision by passionately “envisioning the future, creating an ideal and unique image of what the organization can become” (p. 63). They create a sense of urgency with excitement for the future.
- Challenging the process by searching for opportunities that change the status quo. They take risks, take time to celebrate wins and accept failures as learning opportunities.
- Enabling others to act by building a spirit of teams by creating an atmosphere of trust and human dignity.
- Encouraging the heart by recognizing the contribution of individuals. Encouraging others to believe that leadership applies to all and that “leadership development is self-development.” (p. 63)

Like Reynolds and Warfield (2009), Kotter (2001) affirms that leadership is distinctly different from management but suggests that the two are “complementary systems of action” (p. 85). Leadership is about coping with change. Leaders are visionaries who normally provide experiences from other experiences and job responsibilities. The knowledge and skills obtained from previous positions prove to be essential in the development of a wide leadership perspective. Leaders are motivators

and proficient in creating business prospects. They are interested in the individual workforce at all levels of the organization. Leadership is important in today's organization because leaders align people with the strategic goals of the organization (Kotter, 2001).

Management, conversely, is about coping with the complexity of change. Management develops a roadmap to achieve strategic goals created by the leader. These detailed roadmaps created by management provide order and an opportunity for the individual employee to successfully complete assigned tasks. The overall scope of management includes planning and budgeting, motivating and inspiring, and controlling and solving problems. The distinct roles of leadership and management are necessary for success in today's business environment. Consensus in the literature exists for the two distinct, but complementary, roles of leadership and management during change (Kotter, 2001).

The key to sustaining an organization as a winning enterprise in the 21st century is leadership. In successful organizational change, leaders supply the vision of where they are going and how employees are going to get there. During organizational change, leaders make provisions for new directions by communicating the message for change and strategic mission. They value the skills of the entire employee population. The skills and experiences of the employee population are used to build teams that are trustworthy and empowered. Building effective teams during organizational change requires leaders who teach leadership (Banutu-Gomez & Banutu-Gomez, 2007).

In the book, *Leading at the Edge*, Perkins (2000) uses the adventures of Ernest Shackleton, an intrepid explorer, to provide ten powerful strategies for successful

leadership. Perkins suggests that “cutthroat competition, rapid change, and constant demand for innovation have forced even prosperous companies to the edge of survival” (cover). Vivid descriptions of Shackelton’s leadership abilities, as he led a diversified team of explorers through life and death experiences, provide ten lessons that clearly identify the skills of a leader in today’s global economy.

Perkins’ (2000) ten strategies for leading on the edge include: 1) vision and quick victories; 2) symbolism and personal example; 3) optimism and reality; 4) stamina; 5) the team message; 6) core team values; 7) conflict; 8) lighten up; 9) risk; and 10) tenacious creativity. Leadership is about envisioning change without holding on to the past. Leaders with the capability to lead organizations to the edge must be visible to the workforce, especially during change implementation. Successful leaders are aware that the presence of leadership initiates an exclusive source of energy throughout the organization (Kotter, 2001; Perkins, 2000).

In a case study documented in the book, *Leading at the Edge*, Pat Russo, an executive from AT&T/Lucent Technologies, discusses leadership and skills needed to survive after the deregulation of the Bell Systems in 1984 (Perkins, 2000). The Bell System turnaround plan for the organization was aggressive with multiple rapid change initiatives occurring concurrently. The expectation of the senior executive team was to “lead the parade on change” by focusing on the vision, engaging in open communication, removing barriers and creating a culture of innovation and trust (Perkins, 2000, p.160). Leadership and organizational culture link together in the process of change. It is “only through leadership can one truly develop and nurture a culture that is adaptive to change” (Sarros, Cooper, & Santora, 2008, p.145). Strong leadership remains critical to

successful implementation of an organization (Haley, 2007). Yet, in organizations of all sizes with exceptional leadership, “the right business decisions sometimes fail to achieve desired results” (Levin & Gottlieb, 2009, p. 31).

The results of a study conducted in a state agency indicate that the employee perception of an organizational culture “strong in human relations values and open values would be associated with heightened levels of readiness for change which, in turn, would be predictive of change implementation success” (Jones, Jimmieson, & Griffith., 2005, p.363). Despite, the exceptional leadership at all levels of the organization, it was the employees’ perception of the organizational culture that was predictive of successful implementation of change.

Culture

Organizational culture may be an enabler or an obstacle to individual change readiness (Levin & Gottlieb, 2009). People accept leadership and organizational change only when “their individual cultural heritage and the organizational culture are in harmony because it is that harmony or unique common psychology that engenders confidence, comfort, and trust” (Banutu-Goomez & Banutu-Gomez, 2007, p. 74). Anchoring change in the culture provides an opportunity for the individual employee to align his or her personal behavior and attitude with organization performance improvement (Kotter, 1996a). Therefore, effective organizational change requires a degree of culture modification.

Leaders must provide an organizational culture that clearly identifies standards of behavior with venues to obtain support and facilitate strategic change. Otherwise, the organization may not experience the movement required during the process of change.

Companies across industries with the best strategic vision, adequate planning, committed leadership, and sufficient resources often fail to achieve success because culture change remains challenging. Levin and Gottlieb (2009) suggest some failures are a result of a single source, organization culture. The challenge that leaders encounter with organizational culture is its inability to enthusiastically change. Instead, organizational culture evolves and is shaped by its founders and succeeding leaders (Levin and Gottlieb, 2009).

Wright and Thompsen's (1997) employee capacity for change model aligns employee capacity with organizational change. Leaders using the employee capacity model are aware of the concept of organizational culture not readily changing. The people's capacity includes a four-stage model of visioning, planning, installing, and anchoring during high-velocity change. Anchoring should be conceptualized during the visioning stage and visited in the subsequent stages of the four stage model to successfully adopt organizational change. At the core of this model lies the employee's capacity for "change and embracing personal responsibility for the intended results" (p. 38). Personal responsibility for intended results is equivalent to individual readiness for change. Because organizational culture is multi-layered, it necessitates anchoring and realignment activities which encourage contribution from all members of the organization (Levin & Gottlieb, 2009).

Multi-layered organizational culture is "widely viewed as a source of sustained competitive advantage to businesses" (Sarros, Cooper, & Santora, 2008, p. 147). According to Bantu-Gomez and Banutu-Gomez (2007), organizational culture begins with an individual who has goals and beliefs and evolves over time. This evolution is

often described in the organization's vision, providing employees with characteristics and traits of the desired culture. Researchers, Levin and Gottlieb (2009), define culture as "shared beliefs and values of members of an organization that provide meaning to and influence daily work life" (p. 32). It is imperative to align the organizational culture efforts with the business goals of the institution (Banutu-Gomez & Banutu-Gomez, 2007; Sarros et al., 2008; Levin & Gottlieb, 2009).

The challenges that organizational leaders encounter reside in the layers of historical events and circumstances within a culture that have evolved over time. Culture is "shaped by successful responses to past business challenges and effective organizational and group problem-solving" (Levin & Gottlieb, 2009, p. 34). Therefore, organizational culture, often embedded within the status quo, frequently prevents transformational leaders from re-directing the pathway and vision of the organization.

Levin and Gottlieb (2009) offer six principles to support realignment of strategic change goals within an organizational culture. The principles are suggested for realignment of an organizational culture post change implementation (Levin & Gottlieb, 2009). Organizational culture is not a "monolithic construct" of values and beliefs identical throughout an institution (Levin & Gottlieb, 2009, p. 33). Instead, experiences with large organizations reveal discrete diversified sub-cultures. Therefore, it is essential for organizational leaders to utilize multi-levers for realignment of target sub-cultures positively impacting a vision for change (Levin & Gottlieb, 2009).

Instrumental and symbolic are the two key categories of levers for organizational culture. Instrumental levers "focus directly on modifying the work context and how work is performed and symbolic levers influence people's perceptions, attitudes and the

meanings they attribute to organizational decisions, actions and practices” (Levin & Gottlieb, 2009, p. 34). The two levers work together to change the behavior of individual members of the workforce as well as attitudes and beliefs.

Banutu-Gomez and Banutu-Gomez (2007) cite the research of O’Reilly and Caldwell during a discussion of the seven traits of an organization’s culture which creates a standard of behavior for a desirable vision. The seven traits provide a roadmap for leaders during the conceptualization of work environments responsive to the climate of today’s global market. This philosophy replaces the historical regime of rigid standardization with flexibility of interconnectivity of leadership to individual employees throughout the organization. This network of interconnectivity encourages individual employees to be innovative, take risks, pay attention to details, and focus on the outcomes rather than the process of achievement.

Sarros et al. (2008) suggest organizational culture and leadership link to the process of change. Competitive, performance-oriented organizational culture is defined as a structure of the organization that is ingrained in the values and beliefs of the individual members of the workforce. Organizational culture is referred to as the “meanings inherent in the actions, procedures, and protocols of organizational commerce and discourse” (p. 147). A study conducted by Sarros et al. (2008) includes responses from 1,158 managers in the private sector of Australian organizations. Individual participants measured the effectiveness of organizational culture as a mediator for transformational leadership and a climate of innovation for change. The results supported the theory that organizational culture is an important determinant of innovation. However, organizational culture as a determinant of innovation is dependent

on the degree to which individuals are supported by leadership and encouraged to participate in change (Sarros et al., 2008).

Jones et al. (2005) suggest that many researchers who study organizational change readiness adopt the “three dimensional view of organizational culture: assumption, values and artifacts” (p. 362). Assumptions are beliefs about human nature and the organizational environment which exists and are taken for granted. Values are the shared beliefs and guidelines which manage the behavior of individual employees. Visible language, employee behaviors, and material symbols existing in the organization are artifacts. According to Jones et al. (2005), the perception of readiness for change may differ within an organization and attributed various factors, but it is the “cultural memberships that polarize the beliefs, attitudes, and intentions of members” (p. 364). Therefore, concluding organizational cultures, promoting flexible structures, and supportive employee environments are more conducive to successfully implement advanced technology. Table 4 lists principles, traits, and characteristics that capture the essence of an organization’s culture during rapid change.

Table 4

Culture Principles, Traits and Characteristics with Descriptions

Authors	Principles/Traits/Characteristics	Description
Levin and Gottlieb, 2009	Understand the required scope of change	Alter specific attributes that are no longer useful.
	Model, teach, and embed	Leaders must be primary sponsor of culture alignment.

Table 4 (continued).

Authors	Principles/Traits/Characteristics	Description
Banutu-Gomez and Banutu-Gomez, 2007	Use multiple levers	Culture is multi-faceted and requires multi-levers to effect change.
	Create broad involvement of key organization constituencies	Use the wisdom and talents of all organizational members.
	Mange with rigor and discipline	Importance of managing realignments of the culture.
	Innovation and risk taking	Creativity and taking chances encouraged.
	Attention to detail	The degree to which employee/citizens are expected to show precision and analysis skills.
	Outcome orientation	Leadership ability to focus on results rather than task/s.
	People orientation	Leadership consideration of the effect that decisions have on the “people”.
Sarros, Cooper, Santora, 2008	Team orientation	Degree to which work activities impact the team.
	Articulate vision for the future	Vision positively.
	Foster acceptance of goals	Clear vision drives acceptance of strategic goal.
	Intellectual stimulation	Intellectual stimulation through change message supports organization culture.

Table 4 (continued).

Authors	Principles/Traits/Characteristics	Description
	Provides individual support	Individual support relates to organizational culture.
	High performance expectations	Create a message for high performance positively related to culture change.
	Provide appropriate role models	Leadership supports organization culture through the process of articulating the vision.

Understanding the individual employee's intention to support organizational change in the context of readiness necessitates the review of literature that supports organizational communication, leadership, and culture during change initiatives. According to Haley (2007), the literature that supports the communication message for change, effective leadership and organizational culture provides understanding of change readiness strategies for IT support staff during rapid change in healthcare organizations.

Healthcare and Organizational Change

Members of the healthcare industry in the U.S. and throughout the global economy are attentive to market competition and the impact on a respective organization's ability to sustain financial growth. Healthcare leaders, without fail, submit innovative change in the form of strategic proposals aspiring to improve the quality of care available to patients within prospective communities, while attempting to reduce cost. Hospitals purchase physician practices, collaborate with other hospitals to establish

affiliate relationships, and merge with other healthcare institutions to solidify positions in a competitive market. The reasons for rapid and constant organizational change in healthcare are endless. The needs of the healthcare consumers driving the forces of rapid change.

Healthcare consumers no longer feel content with simply receiving services provided by an organization. Instead, today's patients expect to participate in their care by selecting services based on available information and product efficacy. The information age further allows patients to obtain data that until now has only been available to practitioners. The abundance of healthcare providers allow consumers to select services based on facility and process design, patient satisfaction scores, safety records, and other factors. In hospitals today, patients regularly request transfers to other facilities if they perceive unsatisfactory attention to immediate needs. The expectations of newly informed consumers continue to rise to higher levels, and healthcare providers must combat against new levels of competition.

In 1994, the American Hospital Association estimated a surplus of 447,545 hospital beds in the U.S. (Appelbaum & Wohl, 2000). Addressing new levels of competition, healthcare facilities develop innovative processes while replacing brands and labels in addition to adjusting modifications to physical and emotional climates, all at an alarming rate. Many business leaders attempt to make provisions for the unexpected while monitoring industry standards and conditions. Climate shifts in numerous markets continue to present opportunities and threats (Appelbaum & Wohl, 2000).

To meet the needs of consumers, hospitals, and other providers, healthcare organizations continue to introduce new and complex technology to the organization.

Rapid implementation of the EMR, computerized decision support tools, guest and organizational networks, safety surveillance software, and other hospital information systems presents healthcare administrators with the challenge of ensuring individual employees embrace transformation (Haley, 2007). To successfully implement change initiatives, organizational leaders are obligated to be well informed of the tasks that must be adopted by individual employees (Armenakis & Harris, 2009).

Rapid changes in today's global economy impact the nation's workforce with significant percentages of employee reductions, increased number of contracts with external providers, and the employment of many temporary employees (U.S. Department of Labor). Despite the conditions of the workforce, human resource managers and frontline staff in healthcare expect some level of participation in change initiatives that impact their departments. Yet, while many managers and staff see the participatory style as an optimistic development in healthcare organizations, others remain less responsive and approach such change with anxiety and resistance (Appelbaum & Wohl, 2000; Haley, 2007).

As a result of an ever-changing market, Studer (2003) asks the questions in his book, *Hardwiring Excellence*, "How can we create a culture that can adjust and respond to change? How can hospitals sustain growth and financial gain in such an unpredictable environment?" Studer's response is to "hardwire excellence" (p. 46). Excellence becomes evident when employees are valued and physician's perception of care provided to patients exceeds expectations. Armenakis and Harris (2009) note that survival and prosperity of an organization depends upon knowledge of how to appropriately implement change initiatives that are supported by individual employees.

Children's Healthcare of Atlanta, one of the leading pediatric systems in the country known for "excellence in cancer, cardiac, neonatal, orthopedic and transplant services" recognizes the need to sustain competitive advantage and financial growth (Senior, 2006, p. 40). The senior executives of Children's Healthcare of Atlanta discovered that in today's information driven healthcare industry, the implementation of an EMR would be necessary to maintain and enrich the standing as a leader in pediatric services. The senior executives also recognized the primary factor to successfully implementing an EMR was gaining individual employee support and early adoption. The organization involved hundreds of stakeholders to provide feedback about the change initiative, vendor selections, and methodology for training, implementation, and evaluation. The success of the change implementation was measured by user feedback. The satisfaction survey resulted in an "85% average satisfaction rate with the EMR" (Senior, 2006, p. 43).

Despite the efforts of senior executives, the numbers of successful change initiatives in healthcare continue to lag (Appelbaum & Wohl, 2000). A survey of senior executives from around the world conducted by McKinsey Global consultants reveals that only one third of change initiatives implemented in healthcare organizations were successful (Meaney & Pung, 2008). According to Armenakis and Harris (2009), the 3,199 executives surveyed indicate that an average of six months be devoted to planning each intervention. Yet, despite such detailed planning, the participants report overwhelming failure.

Healthcare organizations must take advantage of the driving forces leading transformation and use them to their advantage as shared by Appelbaum and Wohl

(2000). Today's external environment remains unpredictable, demanding, and often devastating to healthcare organizations unable or unwilling to respond to market conditions (Appelbaum & Wohl, 2000). However, Kanter's (1977) work on organizational change within the healthcare industry indicates that as the pace of organizational change increases, management's commitment wavers as requests are submitted to discontinue consistent change.

Conversely, Kotter (1996a) argues there are some major change initiatives that have been successfully implemented and are beneficial to the organization. According to Kotter, successfully implemented change initiatives help provide structure for organizations for future success. However, for numerous healthcare organizations, change initiatives are simply unsuccessful. The organizations incur excessive costs, experience major disruption, and conclude with a burned-out, scared workforce (Haley, 2007; Kotter, 1996a). There are researchers who suggest healthcare changes fail more often than they succeed (Appelbaum & Wohl, 2000). According to Kotter (1995), organizational change efforts have gone under many banners such as reengineering, downsizing, and culture change to manage the many challenges in today's turbulent market. Despite the pervasiveness of corporate leaders in "too many situations the improvements have been disappointing and carnage has been appalling, with wasted resources and burned-out, scared, or frustrated employees" (Kotter, 1996a, p. 4) Therefore, it remains imperative to understand the negative and positive factors that impact organizational change in healthcare in anticipation of potential pitfalls (Haley, 2007).

Summary

The broad spectrum of work supporting this study on organizational change focuses on the process of change, organizational change, barriers to change, change readiness, change readiness factors, communication, leadership, culture, healthcare, and organizational change. The focal point of organizational change and change readiness theory has been centered on the individual employee's ability to progress through three stages of unfreezing, moving, and refreezing (Armenakis et al., 2007a; Haley, 2007; Lewin, 1947; Schien, 1997). The literature suggests that employee participation at all levels of the organization in the form of change readiness refutes the status quo and advances to adoption, which results in successful implementation of change.

Additionally, the review of historical data and current views surrounding change readiness reveals many factors highly complex in nature (Wittenstein, 2008). However, in the IT environment, understanding the individual employee's intention to support rapid organizational change in context of change readiness requires a literature review of the factors of communication, leadership, and culture during change. According to Haley (2007), the literature that supports these three factors provides understanding of change readiness strategies for IT support staff during organizational change in healthcare institutions.

CHAPTER III

METHODOLOGY

Introduction

The following sections include the research methodology for this study including the instrument, description of participants, and details of the data collection procedures. The climate of the United States economy and the number of change initiatives continue to impact IT staff in healthcare necessitating the exploration of avenues to enhance change readiness. Haley (2007) maintains that rapid change impacts the IT workforce and results in an overwhelmed and disenchanted staff (Haley, 2007). Yet, despite the efforts of senior leaders supporting staff through rapid change, 40% to 90% of change initiatives in healthcare organizations fail (Appelbaum & Whol, 2000; Haley, 2007; Thor et al., 2004). Employee resistance and complacency are significant sources of failed change initiatives (Kotter, 2007).

Opposite of resistance is readiness, a key contributor to successful organizational change. This study determines the impact communication, leadership, and culture have on individual change readiness. Specifically, this study examines the effect Haley's (2007) six strategies: 1) multiple and; 2) open communication; 3) visible and; 4) trustworthy leadership; 5) anchoring behavior; and 6) encouragement of individual participation have on individual change readiness on IT staff in a not-for-profit healthcare system during rapid implementation of an Electronic Medical Record systems. The literature and theoretical framework of this study support a direct relationship between individual change readiness and successful implementation of rapid change. This study

was approved by The University of Southern Mississippi Institutional Review Board.

See Appendix A. The research objectives for this study are:

Research Objectives

RO1: Describe the individual IT support staff's socio-demographic characteristics: a) gender, b) race, c) age, and d) job classification.

RO2: Determine the effect communication strategies have on individual change readiness as perceived by IT support staff.

RO3: Determine the effect leadership strategies have on individual change readiness as perceived by IT support staff.

RO4: Determine the effect culture change strategies have on individual change readiness as perceived by IT support staff.

The researcher acknowledges that the words *effect* and *impact* have specific connotations in quantitative studies. However, in this qualitative study these words do not reference statistical data.

Research Methodology and Design

This qualitative phenomenological study was conducted in the IT department of a not-for-profit healthcare system experiencing rapid and dramatic organizational change. The organization successfully implemented a new and fully integrated EMR across multiple entities. The implementation of the EMR includes installation of multiple clinical and revenue management applications assisting with the alignment of organizational strategic goals and industry standards. The world's largest independent health information technology company provided the clinical revenue management applications. The EMR applications implemented include (see Table 5):

Table 5

EMR Application Implemented

Applications	Description
FirstNet	Automated patient tracking systems built specifically for emergency departments.
Patient management	Management of patient records through information systems scheduling, registration, admission/discharge/transfer activity, and billing/coding.
PathNet	A solution of applications to maintain functionality in the laboratory department.
PharmNet	Fully integrated solution of applications providing enterprise management of pharmaceutical therapy.
PowerChart	Acute care management systems which includes a group of solutions designed to automate care delivery.
Profile	Application used in the healthcare information management department for patient data management, deficiency management, coding and abstracting, release of information, and chart locator.
RadNet	On-line radiology management systems.
SurgiNet	Integrated solution of applications managing point-of-care patient focused surgical data.

Source: Millennium training material

The data collection for this study occurred 18 months after the completion of the Pathway Resources to Implementing Decisions for Excellence (P.R.I.D.E.) project to determine the implication of individual change readiness on the successful implementation of the EMR. Despite the documentation in the literature concerning the high percentage of failed organizational change, evidence suggests that this change effort,

in this healthcare facility, the EMR, was implemented successfully. This study determines the impact effective communication, visible and trustworthy leadership, and a culture encouraging employee participation have on the successful implementation of the EMR.

The study uses a phenomenological research method to “identify the essence of human experiences concerning a phenomenon, as described by participants, in a study” (Creswell, 2003, p. 15). The focus of the inquiry not only seeks to understand the complexity of the experience described by multiple participants, it also tries to interpret the lived experiences. Phenomenological inquiry typically requires four phases: bracketing, intuiting, analyzing, and describing. Bracketing involves identifying preconceived beliefs and opinions about the phenomenon under review. Remaining open to meanings attributed to experience being studied is referred to as intuiting. The analysis process includes compiling the data gathered to obtain common themes and essential meaning of the phenomenon. Finally, the descriptive phase occurs when the researcher achieves complete understanding of the individual’s experience. Using the phenomenological approach to gather data from individuals under study usually requires in-depth interviews (Polit & Hungler, 1995).

Qualitative research interviews are administered to discover the experience of individual employee participants during rapid organizational change. One-on-one interviews create an environment which gives “participants the space to think, speak and be heard” (Smith, Flowers, & Larkin, 2009, p. 57). Using a qualitative research design, the investigator can “determine how meanings are formed through and in culture” (Corbin & Strauss, 2008, p. 12). In the healthcare culture, the use of qualitative research

continues to grow because its framework is valuable in explaining complex phenomena. The method of qualitative research “contributes to health services and health policy research, especially as such research deals with rapid change and develops a more fully integrated theory base and research agenda” (Sofaer, 1999, p. 1101). Qualitative research is also useful in understanding the values of individual people within an organization whose roles and overall contributions are different. Qualitative interviews remain among the most familiar approaches for collecting data and results in the highest rate of return (Armenakis & Fredenberger, 1997; Hager, Wilson, Pollak, & Rooney, 2003; Sofaer, 1999). Despite its familiarity, qualitative interviewing can be time consuming but the “data generated are rich and meaningful” (Armenakis & Fredenberger, 1997, p. 144).

Using a qualitative research approach including semi-structured, open-ended interview questions, this study determines the impact Haley’s six strategies have on the successful implementation of the EMR implemented on January 25, 2012. A constructivism approach was used to understand the multiple participant meanings of the implication communication, leadership, and culture have on change readiness and successful organizational change. Knowledge claims are used to seek the experiences of IT staff as they engaged in rapid organizational change and whether the use of change readiness strategies aided in successful implementation of the EMR.

Population

The setting of this study takes place in a not-for-profit healthcare system which includes four hospitals, two urgent care clinics, one telemedicine facility, eleven hospital owned practices, and six healthcare affiliates. The number of hospital beds range from ten beds to 320 beds with over 2,000 employees. The not-for-profit healthcare system

offers inpatient, outpatient diagnostic, emergency, cardiac, medical, neurological, orthopedic, pediatric, and surgical services all requiring complex interactive technology to ensure safe and quality patient care. The participants of this study include IT support staff for all facilities of the healthcare system. Criteria for inclusion in the study are as follows:

1. Individuals employed and working in the IT department during the 18 months prior to implementation of the EMR. Employees hired after implementation of the EMR are unable to discuss the impact of change readiness strategies employed prior to the implementation of the EMR.
2. Individuals employed and working in the IT department during the implementation of the EMR. Employees employed prior to and during implementation of the EMR are able to think back to the implementation of the EMR and determine if change readiness supported the IT staff through the rapid organizational change.
3. Individuals not considered a member of the leadership team. The leadership team is responsible for implementing change readiness strategies and therefore will not be interviewed.

IT support staff employed 18 months prior to and during the implementation of the P.R.I.D.E. project were invited to participate in face-to-face interviews. Based on the criteria for inclusion, 28 of 50 IT support staff members were eligible for participation. Prior to implementation of the study, one of the eligible participants resigned from the organization, lowering the possible number of participants to 27. Sixteen of 27 eligible

IT support staff volunteered to participate in the study. Fourteen individuals ultimately met the criteria and interviews were conducted.

The IT department is physically located in the acute care hospital which employs approximately 1,500 employees with a maximum bed capacity of 320. The other facilities of the not-for-profit healthcare systems do not have dedicated IT staff. At the time of the study, the IT workforce included 50 employees: one executive, one executive assistant, ten leadership members, and 38 IT support staff. The IT support staff is divided into seven teams working together to implement hardware equipment and software applications supporting a fully integrated and functional systems. All teams are responsible for ensuring all efforts are in alignment with organizational strategic goals and priorities.

The seven teams are: 1) computerized support analysts (CSA); 2) systems analysts; 3) network engineers; 4) clinical analysts; 5) patient services analysts; 6) financial systems analysts; and 7) information systems specialists. The IT teams are also assigned facilities, front-line staff, organizational groups, and leadership teams to ensure ease of access for the user community and rapid delivery of technology support. The primary responsibility of the IT support workforce is as follows:

1. *CSAs* are primarily responsible for computer desktop and peripheral device management.
2. *Systems Analysts* monitor system-wide databases and application interfacing.
3. *Network Engineers* maintain the network infrastructure for the entire organization. The engineers support network components such as Novell

Netware operating systems, Microsoft Windows operating systems, switches, routers, and virtual private networks.

4. *Clinical Analysts* provide the entire organization with support and communication necessary to develop and successfully implement a variety of applications. Clinical analysts must offer twenty-four hour support to guarantee systems availability and reliability necessary to deliver safe and quality patient care.
5. *Patient Services Analysts* develop and maintain scheduling, registration, charge services, and accounting functionality for the patient population. The group provides analytical reporting for organizational operation improvements.
6. The *Financial Systems Analysts* communicate, develop, and maintain purchasing, inventory, budgeting processes, and general financing applications. Additionally, Financial Systems Analysts collaborate with others within the organization to ensure consistent, timely and cost effective implementation of organizational projects.
7. *Information Systems Specialists* are the first level of technical support for computer hardware and software issues. The information systems specialists support systems upgrade, interact with vendor community, and maintain helpdesk request.

Research Instrument

Considering the purpose and qualitative design of the study, a phenomenological strategy was utilized. This method and design allowed a thorough examination of the

perceived experience of IT department employees on matters of change readiness. As described by Polit and Hungler (1995), phenomenological inquiry involving people's experiences and gathering of data normally occur through in-depth interviews. Obtaining the experiences of IT support staff during the implementation of an EMR is a key factor in determining whether change readiness strategies result in successful management of rapid organizational change specific to the IT workforce. To reiterate, this study occurs after the implementation of a change initiative and seeks to determine the impact of change readiness strategies on the successful implementation of the EMR.

The literature concerning change readiness provides extensive data concerning studies conducted prior to implementation of an organizational change initiative. This study occurs post implementation of a change initiative. Questions for this study were developed from an instrument created by Bouckenooghe et al. (2009). This instrument measures change readiness occurring post implementation of change in various organizations. The instrument, Organizational Change Questionnaire-Climate of Change, Processes, and Readiness (OCQ-C, P, R) was developed by Bouckenooghe et al. and was selected for this study because the questions are in alignment with Haley's (2007) research which include the categories of communication, leadership, and culture and provided responses applicable to the objectives. Permission to use this instrument was granted by Bouckenooghe et al. (2009). See Appendix B.

Bouckenooghe et al. (2009) conducted four studies to create an instrument to "measure the circumstances under which change embarks (i.e., climate of change or internal context), the way a specific change is implemented (i.e., process), and the level of readiness at the individual level" (p. 591). The instrument consists of a 42-item

psychometrically sound assessment tool categorized in 11 dimensions. The dimensions include five climate-of-change items, three process-of-change items, and three readiness-for-change items. According to Bouckenooghe et al., the creation of the instrument provides unique and valuable contributions to the study of change which include:

- Step by step design of this instrument that results in initial reliability and validity.
- Instrument is both person and organization centered.
- The 42 questions cover all dimensions, and because of its reliability and validity, there is no need to administer the complete questionnaire. Specific dimensions of the questionnaire can be administered and not jeopardize the psychometric quality. The scales can also be used with other instruments to measure change readiness.
- The psychometrically sound instrument assesses the perception of the individuals involved in the change. Therefore, it is possible to identify gaps between various groups involved in the change initiatives.
- The OCQ-C instrument has advantage over other instruments because the study has been administered to employees at various levels within 85 different organizations and with specific change initiatives. The instrument is also unique in its design to diagnose employee readiness for change.

The original questions were modified for the present study. The research questions were converted from a quantitative to a qualitative format. A qualitative method is preferred over the quantitative design because the intention is not to extract numerical data or illicit inference from the analysis of the data (Neuman, 2006). Rather,

the intention is to solicit the experiences of individual IT staff prior to the implementation of the EMR and the impact change readiness strategies have on successful implementation of IT change initiatives. Questions from the instrument were combined to convert items to eight semi-structured open-ended questions. The number of questions was reduced for appropriateness for a qualitative interview (Creswell, 2003). The eight instrument questions created are included in Appendix C. Each question is linked to a specific research objective. See Table 6.

Table 6

Research Objectives Linked to Interview Questions

Research Objectives	RQ Item Numbers
RO1	1
RO2	2, 3, 4
RO3	4, 5, 6, 7
RO4	6, 7, 8

Validity and Reliability

The organizational change instrument was selected because of the appropriateness of the content for this study and the validity and reliability of the original instrument. The validation process is in alignment with the recommendations of the psychometric theory standards which requires three standards of validity: content, construct, and criterion-related validity. To create the questionnaire Bouckenoghe et al. (2009) followed guidelines from Hinkin (1998) which provides detailed instructions for

developing measures for survey questionnaires. Using literature from James, et al. (2008) on climate dimensions and Armenakis et al. (1993) and Holt et al. (2007) on change readiness, Bouckennooghe et al. (2009) created the 42-item questionnaire.

The validation process of the organizational change questionnaire includes four studies: 1) examination of content validity of an original 63 item tool; 2) a test of factor structure and construct validity; 3) examination of scales from study two to determine replication in a different sample; and 4) development of an English version from an original Dutch study (Bouckennooghe et al., 2009).

The content validity of the instrument selected was validated by a panel of ten judges, all academic staff from an organizational behavior department of a business school in Belgium. Using a content adequacy test, the panel of judges analyzed the instrument's 63 questions using the descriptive information of the ten dimensions. The ten dimensions were developed prior to the judge's validation process. The dimensions are: 1) process of change; quality of change communication (QCC); 2) participation (PAR); 3) attitude of top management toward change (ATC); 4) support by supervisors (SBS); 5) climate of change or internal context trust in leadership (TLE); 6) politicking; 7) cohesion; 8) readiness for change emotional readiness for change (EMRE); 9) cognitive readiness for change (COGRE); and 10) intentional readiness for change (NRE) (Bouckennooghe et al., 2009).

Following the review of the ten subject matter experts, three independent studies were conducted to validate the reliability and validity of scales. To analyze the factor structure, Bouckennooghe et al., (2009) administered the 63-item instrument to more than 1,300 employees at various levels within 45 organizations. Procedure factor analyses

were also performed from data obtained from the study, which resulted in items being eliminated from the original instrument. Eventually the questionnaire was administered to over 3,000 employees at various levels within 85 organizations. Bouckenooghe et al. (2009) concur “these findings suggest that our 42-item Dutch OCQ, P, R meets the standards of a psychometrically sound measurement instrument” (p. 592).

The questions selected from the organizational change instrument used in this study are factors of general content and change specific origin. The modification of the instrument from a quantitative format to qualitative unstructured and open-ended interview questions required additional validation of the instrument. Validation was conducted by 6 of the 11 members of the IT leadership team at the study’s acute care hospital. During special scheduled meetings, six members of the IT leadership team examined the questions for content validity. The team concluded the instrument’s content validity was appropriate for this study.

Confidentiality

Maintaining confidentiality throughout the research project was imperative. Confirmed volunteers were assigned a participant number not linked to any personal identifiers. All information gathered was linked to each volunteer’s interview number. At no time have any comments been linked to an individual. No personal identifiers for any participant were included in any data in the project’s final report. The data gathered will only be used for the sole purpose of completing doctoral research requirements. The responses of individual participants will not be shared with anyone in the organization. Direct quotes linked to participants will not be used in the final report submitted to the organization. Only aggregate themes from answers will be shared in written documents.

Therefore, it is impossible for organizational leaders to link participant responses to specific employees.

Data Collection

Schaefer and Dillman (1998) suggest use of mail, telephone, and face-to-face interviewing as the most powerful determinants of response rates. Decision to participate correlates with the number of times a respondent is contacted and invited to participate (Schaefer & Dillman, 1998). Potential participants were invited to participate in this research project on three separate occasions, using multiple methods of contact. The initial contact was a personalized letter from the project sponsor, the COO of the organization, announcing the study and including a request for volunteers. See Appendix D. A second mailer from the researcher was sent with project timelines, a request for volunteers, and a postcard for scheduling face-to-face interviews. See Appendixes E and F. The final contact included an email from the project sponsor announcing the final request for participation and a reminder about the project timelines. See Appendix G. The study's procedures included the following (see Table 7):

Table 7

Study Procedures

Schedule Time	Task
Week 1	Mail letter from project sponsor to eligible participants
Week 2	Mail 2 nd mailer with method to schedule appointment
Week 3	Begin interview, transcribe interview data

Table 7 (continued).

Schedule Time	Task
Week 4	Continue interview, transcription, and data analysis Mail thank you cards and end of week Conduct final interviews, transcribe data and final analysis
Week 5	Email message from project sponsor with study deadline Conduct interviews, transcribe data, and data analysis Mail thank you cards end of week
Week 6	Conduct final interviews, transcribe data, and final analysis Draw for gift certificate and announce winner of drawing

In Week One, the IT support staff received a personalized letter through inter-office mail about the study which included criteria for participation in an in-depth, face-to-face interview. The personalized letter included a project endorsement from the chief operating officer of the health care system. Also, the letter included terms concerning confidentiality and anonymity of the interview process. As described by Schaefer and Dillman (1998), personalization shows the potential participant importance, and it also increases the response rate. Additionally, the personalized letter included information about the monetary incentive for study participants. Participants completing the interview process were included in a drawing for a \$100.00 Visa card. Monetary

incentives have an extensive history in survey designs and maintain a role in increasing survey response rates (Ryu, Couper, & Marans, 2005).

In Week Two, a second mailer was sent via inter-office mail to all participants. The personalized letter encouraged eligible IT staff to become study participants. The mailer included participants' contact information and a card to rsvp or suggest interview dates and times convenient to the participant. Once project participation was confirmed, a standard procedure for all interviews was used. The introduction script included an overview of the research process. See Appendix H.

During Week Three of the study, appointments were scheduled, interviews began, and data was transcribed as the interviews occurred. Using a semi-structured interview process with open-ended and probing questions, the interviewer began the interview with a standard opening statement and use of an introduction script. Semi-structured interviews are flexible, allowing the interviewer to modify the order of the questions. Modification of the questions allowed the respondents to have some control of the interview process, but because the same questions were asked to all participants, it is possible for the interviewer to compare questions across interviews (Bernard & Ryan, 2010). Study participants were given a copy of the questions so the participant could review and read along. The interviewer referred to a document with opening comments, general instructions, and interview questions with space to document responses. Creswell (2003) recommends recording interviews for accurate transcription of interview notes. An audio recorder was used to record the interviews (Creswell, 2003). Respondents were reminded to think back to the P.R.I.D.E. project. The participants were also asked to think back to the project's formal announcement presented by the

COO of the organization which included the project's timeline, guiding principles, and the potential impact of the change to the organization. The study participants were asked to think back to the many meetings, multiple trips out of state to the vendor site, and the implementation of the EMR. At the end of Week Four, personalized thank you cards were sent to individuals completing the interview process.

At the beginning of Week Five, an email message from the project sponsor, the organization's COO, was forwarded to eligible study participants who had not volunteered for interviews. The email explained project deadlines. Once more, IT staff meeting the study criteria were encouraged to participate by highlighting the value of each participant's contribution to the study. The message included a reminder of the drawing for a \$100.00 gift card. As described by Schaefer and Dillman (1998), studies conducted where multiple contacts were initiated yielded a higher level of response compared to studies that administered one or two contacts to eligible participants.

The final interviews were conducted during Week Six. All interviews were transcribed and final analysis of data gathered during in-depth interviews began. The executive secretary of the IT department drew for the winner of the gift card. The winner was presented with a \$100 gift certificate. The presentation occurred during a department meeting expressing the interviewer's gratitude for participation in the study.

Data Analysis

The Interpretative Phenomenological Analysis (IPA) approach was used as a guide for examination of the qualitative data gathered during the interview process. The NVivo software was used in conjunction with IPA to electronically code and assist with analysis of the qualitative research data. NVivo is employed as a qualitative data analysis

tool for IT studies, novice researchers, and academic teachers involved in research training (Bandara, 2006; Walsh, 2003).

The “IPA is a qualitative research approach committed to the examination of how people make sense of major life experiences” (Smith, et al., 2009, p. 1). The IPA is phenomenological because it seeks to understand the individual’s relationship and the meaning of activity occurring around them. IPA is best suited in studies which invite the participant to provide rich and detailed accounts of personal experiences. In-depth qualitative interviews are a suitable method for collecting data when using the interpretative phenomenological analysis.

The IPA interview allows researchers to plan and use an interview schedule. Planning and development of an interview schedule are drivers for creating detailed interview questions which encourage participants to speak extensively and openly about life experiences. The IPA process of analysis includes a six-step method for the first case and continuing the procedure until all cases have been analyzed. The IPA guidelines include the following steps:

1. Reading and re-reading – researcher immerses into original data. Once the interview is transcribed, the researcher is encouraged to listen to the audio recording to ensure a semantic record of the interview is transcribed. A semantic record means the transcript includes all words spoken by anyone who is present. Repeated reading provides the researcher with an understanding of the data which may describe linkages between topics, general versus specific information, exploit contradictions in statements, and list chronological events.

2. Initial noting – research produces an inclusive set of notes and comments about the data collected during the interview. Step 1 and 2 merges as the researcher comments on similarities, differences, and contradictions provided by the interviewee.
3. Developing emergent themes – the analysis changes as the researcher looks at emergent themes and simultaneously attempts to reduce the volume of details. The researcher switches from working on the transcript to focusing on the researcher's notes. The interview becomes a set of parts as the analysis of emergent themes is developed. This process represents the hermeneutic circle.
4. Searching for connection across emergent themes – involves exploring how the chronological themes fit together. The researcher is reviewing the themes as they occur and producing a structure of the most important aspects of the individual's experience.
5. Moving to the next case – this phase requires taking the next interview script and repeating steps 1 through 4. It is important when using IPA to allow new themes to emerge with each case.
6. Looking for patterns across cases – this means looking at themes across cases, looking for similarities and differences, and exploiting themes that are powerful. This often requires relabeling and restructuring of themes (Smith et al., 2009).

The NVivo software supports the IPA process by providing five principles for information entered into the application: 1) manage data; 2) manage ideas; 3) query data; 4) graphically model; and 5) report from the data (Bazeley, 2007).

- Manage data – to organize information obtained from interviews, published recording supporting design methodology and jotted notes and memos.
- Manage ideas – to organize conceptual and theoretical knowledge gathered throughout the study and information supporting this knowledge.
- Query data – to ask questions of the data and have the application retrieve all information relevant to the question asked.
- Graphical model – to display ideas and concepts from data gathered during the interview process using models and matrices.
- Report from the data – using a qualitative database, provide information about original data sources, knowledge developed, and outcomes reached from study.

The IPA process provided a foundation for subsequent interviews. The comments, notes, and themes obtained during the first participant's interview were compared to data reported by other participants to develop themes and patterns. The reported data from participants were managed in NVivo.

Summary

This study uses a qualitative research approach including semi-structured interviews to determine the impact of Haley's (2007) six strategies on the successful implementation of the EMR of a not-for-profit healthcare system. A constructivism approach was used to understand the meanings provided by multiple study participants

concerning the implication that communication, leadership, and culture have on change readiness and successful organizational change. This study was conducted in the IT department of a not-for-profit healthcare system experiencing rapid and organizational change. A phenomenological method and knowledge claims were used to identify the experiences of IT staff as they engaged in rapid organizational change (Creswell, 2003).

The data collection of the present study occurred 18 months after the completion of the Pathway Resources to Implementing Decision of Excellence (P.R.I.D.E.) project to determine the impact of individual change readiness on the successful implementation of the EMR. Despite the high percentage of failed organizational change, especially in healthcare, evidence exists that the EMR was successfully implemented in this acute care facility. The multiple applications implemented worked as designed, and there were no recorded patient incidents due to the installation of the EMR.

CHAPTER IV

RESULTS

Since Lewin's (1947) early research, theorists from different disciplines continue to contribute to the understanding of individual change readiness during rapid organizational change (Appelbaum & Whol, 2000; Armenakis, et al., 1993; Haley, 2007). Bernerth concurs that "researchers and practitioners have both found employee readiness to be a critical factor in successful change efforts" (Bernerth, 2004, p. 36). In response to ongoing change and high percentages of failed initiatives, organizations are implementing internal change through open communication, leadership, and employee participation. The challenge to implement change remains evident for organizational leaders in healthcare as the pace of change accelerates.

The purpose of this study is to analyze IT support staff readiness in a not-for-profit healthcare organization during the implementation of a change initiative. This study specifically examines the effect Haley's (2007) six strategies have on individual change readiness during the implementation of an EMR in a not-for-profit healthcare system. Haley suggests without multiple methods of open communication, visible and trustworthy leadership, and a culture that encourages individual employee participation, the benefits of success will not be maximized. Eight interview questions were asked to determine participant's perception of the impact communication, leadership, and culture had on the successful implementation of the Pathway Resource to Decision of Excellence (P.R.I.D.E.) EMR. The P.R.I.D.E project was the implementation of electronic medical records in three hospitals in a healthcare system. The EMR consisted of an integrated platform of clinical and financial applications.

Interview questions for this study were developed from an instrument created by Bouckenooghe, et al. (2009). See Appendix B. The semi-structured interview questions were converted from quantitative to qualitative questions. The instrument was validated by selected leadership staff within the IT department prior to conducting face-to-face interviews. The eight questions were linked to the study's research objectives.

The analysis of the interview data began with the use of the Interpretative Phenomenological Analysis (IPA). See Appendix K. The Interpretative Phenomenological Analysis (IPA) provides a systematic process for analyzing and interpreting emerging themes of real life human experiences. This process permits individual experiences to be articulated and documented without the use of predefined categories. The IPA process provides a venue for individual participants of qualitative studies to share their personal perspectives beginning with a detailed examination by the interviewer of each case (Smith et al., 2009). The data in Appendix K includes key terms, descriptions, and assumptions from the first participant interview. Using the first interview record, the interviewer explored key phrases, events, experiences, and emotional comments of the participant. The interview highlighted the real life experiences of the participant as seen in Table 8 (Smith et al., 2009). The notes and comments from the original transcript allows the interviewer to document similarities and contradictions from the data reported. Once this process was completed, the analysis changed as the interviewer began to develop themes from reported participant responses (see Table 8).

Table 8:

Emerging Themes and Exploratory Comments

Haley's (2007) Change Readiness Strategies	Themes and Exploratory Comments
Communication	
1. Multiple Methods 2. Open	<p>Multiple methods: emails, meetings, group sessions, interoffice types</p> <p>Detail explanation about methods</p> <p>Began with announcement in preparation of the project and eventually added other methods of communication</p> <p>Lots of communications</p>
Leadership	
3. Visible 4. Trustworthy	<p>Assertive when responding to question 'YES' to leadership questions.</p> <p>Comfortable with open sessions with managers</p> <p>Senior executives involvement in the beginning (Visible) Department senior executive available (Trustworthy)</p> <p>Mentioned department senior executive availability</p> <p>Leadership communication adequate</p> <p>Visits to department perceived as important</p>
Culture	
5. Participation 6. Anchoring	<p>Participant hesitant about discussing unconditional support</p> <p>Body language changed, tense, moving around not sure what this implies, will monitor in other interviews for theme</p>

Table 8 (continued).

Haley's (2007) Change Readiness Strategies	Themes and Exploratory Comments
	Perceived culture of participation and anchoring adequate
	Willing to participate in future IT change initiatives

The themes of the initial participants were then analyzed to determine connections across themes and abstracted to develop theme titles or categories. For example, participant 001, discussed communication occurring via email, meetings, group sessions, and impromptu visits from senior executives. These themes were abstracted and entitled *multiple methods of communications*. This process was continued when reviewing data from subsequent interviews and eventually cross-referenced among participants to determine study results.

Socio Demographic Characteristics

Research Objective 1: Describe the individual IT support staff's socio-demographic Characteristics: a) gender, b) race, c) age, and d) job classification.

The study was conducted in a not-for-profit healthcare system. The participants of this study include IT support staff for all facilities of the healthcare system. The IT staff participating in the face-to-face interviews ranged across all IT teams with the exception of the financial team (see Table 9).

Table 9

Team, Job Classification and Participants (n = 14)

Team	Job Classification	Number of Participants
Clinical	Laboratory Pharmacy Analyst Radiology	3
CSA	Personal Computer Desktop Analyst	1
Network	Communication Coordinator	1
Information System	Helpdesk Support Specialist	2
Patient Services	CCL Programmer Patient Management Revenue Cycle Analyst	3
Systems	Charge Service Analyst Database Administrator Interface Analyst Systems Analyst	4

Members from the financial team met the criteria for participation. However, during an interview with the first participant from the financial team, it was determined that except for the supervisor, the financial team was not directly involved in the P.R.I.D.E. EMR implementation. Therefore, members from the financial team were omitted from the study.

Sixteen out of 27 eligible IT support staff volunteered to participate in the study. A total of 14 face-to-face interviews were completed. One potential participant from the financial team self-eliminated due to lack of involvement in the project. One other

potential participant did not meet the criteria because he was not employed prior to and during the 18 months of the P.R.I.D.E. project. More females (57%) completed the face-to-face interviews than males (see Table 10).

Table 10

Gender and Race

Gender	Race	Number of Participants	Mean
Female	Black	2	14.3
Female	White	6	42.8
Male	Black	1	07.1
Male	White	5	35.7
Total		14	100.0

Seventy-five percent (n = 14) of the females participating in the study were Caucasian and only one of the six male participants was Black. The average age of participants was 53.9 years old with 64% (n = 14) between the ages of 56 and 65 (see Table 11). The distribution of participants represented a mature workforce.

Table 11

Age of Participants (n=14)

Age Range	Number of Participants	Mean Age
25 – 35	0	0
35 – 45	2	14.3
46 – 55	3	21.4
56 – 65	9	64.3
Total	14	100

Communication Strategies

Research Objectives 2: Determine the effect communication strategies have on individual change readiness as perceived by IT support staff.

Participants were asked a series of questions to determine the impact communication strategies, multiple methods, and open two-way communication have on individual change readiness as perceived by IT support staff. See Appendix B for questions 2, 3, and 4. Haley's (2007) communication strategies of multiple methods and open communication were perceived by IT support staff as positively affecting individual change readiness. Most, 92% (n = 14), of the IT support staff across teams perceived the persuasive communication concerning the P.R.I.D.E project to be open, clear, effective, and concise.

The communication strategies shared by all participants included open face-to-face dialogue during employee forums, IT department meetings, and interoffice meetings (see Table 12).

Table 12

Qualitative Collection for Communication by Teams

Roles		Themes
Customer (CSA)	Support Analyst	<p>Communication Strategies Method</p> <ul style="list-style-type: none"> • Email • Weekly meeting • Department meetings <p>Open</p> <ul style="list-style-type: none"> • Clear and concise • Understand necessity for communication • Messages from team leads • Minimal interaction with senior executives
Systems Analyst		<p>Communication Strategies Methods</p> <ul style="list-style-type: none"> • Conference calls • Department • Conference calls • Department meetings • Email • Flyers • Verbal communication • Face-to-face conversations • Meetings with vendor • Communication methods had positive impact on success • Impromptu visits from executives <p>Open</p> <ul style="list-style-type: none"> • Informed about project with discussion • Information clear and concise • Open sessions with leadership team

Table 12 (continued).

Roles	Themes
Network Engineer	<ul style="list-style-type: none"> • Meetings with vendor and other vendor clients • Email with project timelines, tasks, and responsibilities <p>Communication Strategies</p> <p>Methods</p> <ul style="list-style-type: none"> • Email • Group meetings with scheduled department walk through • Meetings and forums • Team meeting to discuss network connectivity <p>Open</p> <ul style="list-style-type: none"> • Forums and meetings open • Regularly informed to a degree with some non-negotiable items • Lack of collaboration and communication between groups
Clinical Analyst	<p>Communication Strategies</p> <p>Methods</p> <ul style="list-style-type: none"> • Email • Electronic posting on vendor site • Face-to-face informal meetings • General meetings • Meeting with all teams, executives, and vendor <p>Open</p> <ul style="list-style-type: none"> • Clear and effective communication • Open team discussion • Regularly informed and able to ask questions
Patient Service	<p>Communication Strategies</p> <p>Methods</p> <ul style="list-style-type: none"> • Emails

Table 12 (continued).

Roles	Themes
Information Systems Analyst	<ul style="list-style-type: none"> • Flyers • Meetings • Random face-to-face conversations <p>Open</p> <ul style="list-style-type: none"> • Communication not clear and effective during project announcements • During project events communication clear and concise • A lot of informal communication • Informal communication not always filtered through all teams • Limited communication due to aggressive project timeline • Abundance of communication around improvement directly related to EMR implementation <p>Communication Strategies Methods</p> <ul style="list-style-type: none"> • Emails • Face-to-face • Handouts • Meeting and forums <p>Open</p> <ul style="list-style-type: none"> • Adequate and clear dialogue • Remained informed but not sure of expectations

Participants reported attending meetings held by managers of various teams to discuss project details, timelines, and collaboration across IT support teams. Additionally during face-to-face interview sessions, participants discussed informal visits from senior executives. The impromptu visits from senior leaders provided an opportunity for

organizational leaders to discuss project timelines and to ensure adequate resources were available. The various visits from organizational leaders were important events to participants in the study because project status was discussed and next steps were documented.

Participants reported other methods of communication such as email and handouts that were used to create awareness and to post announcements of future project events. Study participants concur that this type of communication, multiple methods, was particularly evident during the initial announcement of the IT project. Some participants struggled to conceptualize aspects of the project during the early announcements. However, as project activities continued to develop, the participants began to understand the many facets of the IT project. Informal meetings also occurred across IT support teams during the early stages of the IT project. One interviewee perceived this communication as ineffective and felt informal dialogue across teams was not adequately dispersed to the entire team. When asked if the informal face-to-face meetings had a negative impact on the project, the respondents replied that it did not. Nonetheless, one study participant perceived the informal dialogue to be the reason additional tasks were included on the implementation readiness list, and this also promoted a lack of collaboration between IT support teams.

External sources of information were utilized in the readiness communication message, according to participants (n = 14) in the study. Study participants discussed collaboration efforts occurring between the EMR vendor's subject matter experts and organizational leaders during employee forums, visits out of state to the vendor, and web conferencing with other consultant firm clients. Participants (n=14) conveyed that these

external sources provided open communication channels regarding the project with a clear road map of assignment details. The vendor, other vendor clients, IT support staff, and organizational leaders discussed expected improvements and the aggressive timeline necessary to meet government mandates. The vendor also posted electronic documents announcing project deliverables and project timelines, according to respondents (n = 14). The visits out of state to the vendor site included personnel from various departments throughout the entire organizational system including IT personnel.

During the various communication sessions, information exchange occurred and relationships were developed between organizational staff from all departments, leaders, and vendor personnel. Although study participants mentioned calls with other clients of the consulting firm, no references were made to the effect the calls had on individual change readiness. However, all (n = 14) study participants confirmed that when looking back at the many facets of the project, Haley's communication strategies positively impacted the project as perceived by participants. Additionally, when asked to think back to IT and organizational leadership involvement, responses from IT employees appeared to be more reserved and varied across teams. The participants appeared apprehensive, and questions referencing leadership required defining whether the leader was a member of the executive team or an IT manager, referred to as a direct report.

Leadership Strategies

Research Objective 3: Determine the effect leadership strategies have on individual change readiness as perceived by IT support staff.

Change leadership remains a very complex aspect of successful implementation of organizational change. To determine the effect leadership had on successful

implementation of an electronic medical record as perceived by IT staff, study participants answered questions about the visibility and supportiveness of organizational leaders. See Appendix B for questions 4, 5, 6, and 7. The questions explored IT staff's ability to genuinely participate and engage with leaders at all levels of the organization.

The participant responses suggest that organizational leaders effectively embedded Haley's (2007) visible and trustworthy, change readiness strategies to persuade individuals to pursue goals impacting the overall welfare of the entire organization. However, despite the efforts of organizational leaders, perceptions varied across IT teams. All 14 staff members interviewed expressed a level of comfort with their direct reports (see Table 13).

Table 13

Qualitative Collection for Leadership by Team

Roles	Themes
Customer Service Analyst (CSA)	<p>Leadership Strategies</p> <p>Visible</p> <ul style="list-style-type: none"> • Managers responsive during problem resolution • Managers constantly communicating the months leading to the EMR implementation • Very little interaction with senior executives but constant communication with all levels of the organization <p>Trustworthy</p> <ul style="list-style-type: none"> • Genuine environment of participation created by direct reports • Supervisor very supportive

Table 13 (continued).

Roles	Themes
System Analyst	<p>Leadership Strategies</p> <p>Visible</p> <ul style="list-style-type: none"> • Senior leadership initially introduced project events • Manager very supportive
Network Analyst	<p>Leadership</p> <p>Visible</p> <ul style="list-style-type: none"> • Senior executives clearly explained and remained actively involved • Manager in IT department available and supportive <p>Trustworthy</p> <ul style="list-style-type: none"> • Manager supportive and participants comfortable asking for additional resources • Genuine environment of participation • Not sure if environment existed for other staff
Clinical Analyst	<p>Leadership Strategies</p> <p>Visible</p> <ul style="list-style-type: none"> • Executive leaders visible and involved from the beginning explaining aggressive project time line • Executives, managers, and supervisors traveled with staff to vendor site <p>Trustworthy</p> <ul style="list-style-type: none"> • Difficulty remembering what took place 18 months back • Senior executives explained government regulations and the impact to project timeline • Genuine climate of participation except timeline could not be modified despite project issues • Manager very supportive • Senior executive approved additional resources when needed to meet project deadlines

Table 13 (continued).

Roles	Themes
Patient Services	<p data-bbox="753 457 846 489">Visible</p> <ul data-bbox="802 499 1321 604" style="list-style-type: none"> <li data-bbox="802 499 1321 531">• Impromptu visits by senior executives <li data-bbox="802 537 1321 604">• Manager available and participants comfortable requesting assistance <p data-bbox="753 611 911 642">Trustworthy</p> <ul data-bbox="802 653 1430 974" style="list-style-type: none"> <li data-bbox="802 653 1430 789">• Impromptu visits by senior executives did not include all staff and sometime perceived the climate of trust and transparency not adequate <li data-bbox="802 800 1430 905">• Study participants who did not travel with executives to the vendor site perceived senior leaders as not being visible <li data-bbox="802 915 1430 974">• Staff allowed to participate as long as go-live not impacted
Information Systems Analyst	<p data-bbox="753 1020 1029 1052">Leadership Strategies</p> <p data-bbox="753 1058 846 1089">Visible</p> <ul data-bbox="802 1100 1430 1241" style="list-style-type: none"> <li data-bbox="802 1100 1430 1167">• Senior executives communicated necessity of project <li data-bbox="802 1173 1430 1205">• Senior leaders were definitely hands on <li data-bbox="802 1211 1430 1241">• Managers kept staff informed <p data-bbox="753 1247 911 1278">Trustworthy</p> <ul data-bbox="802 1289 1430 1461" style="list-style-type: none"> <li data-bbox="802 1289 1430 1394">• Validated the climate of trust and transparency between staff and leaders as all worked diligently to help EMR users <li data-bbox="802 1400 1430 1461">• All, leaders and staff informed of project goals

The IT department managers and supervisors assisted the staff when issues were encountered, as perceived by participants (n=14). Participants contend that managers were instrumental in resolving problems across teams and pivotal to the success of the entire project. Overall, the interviewees from the IT systems, clinical, network and patient services teams perceived organizational leaders as visible and trustworthy. Only

one Clinical Analyst perceived IT leaders as verbally supportive but experienced difficulty when pursuing resolutions and follow-up in other organizational departments. The Clinical Analyst viewed the IT manager's inability to access key leaders within the organization for problem resolution as an obstacle for meeting project milestones.

Participants from the systems, clinical, patient services, and network teams had face-to-face discussions with senior executives during impromptu visits to the department. These visits were viewed as important and provided an opportunity to discuss project wins and opportunities for improvement with top leadership members. These visits confirmed for analysts of the systems, clinical, patient services, and network teams that organizational leaders were visible and trustworthy. During these impromptu visits participants perceived leaders as accessible to staff and visible change agents. The respondents felt safe to participate and engage leaders. Therefore, these respondents perceived the leadership strategies to have a significant effect on individual change readiness.

An analyst from the clinical team confirmed that it was during one of these encounters that senior leaders approved additional resources to build and test system functionality. The Clinical Analyst reported attending forums with leaders and staff from all levels of the organization and voiced an understanding of projects goals. Only one of the participants from the clinical team found it difficult to recall leadership as supportive during the P.R.I.D.E project. Members of the IT systems, clinical, network patient services, and information analyst teams were comfortable with leaders throughout the organization. This level of comfort with organizational leaders experienced by these

analysts was contrary to the CSA's perception, whose encounters were primarily with team leaders and technical staff.

The CSAs installing new hardware and desktop applications in preparation for the EMR implementation reported having very little interactions with senior leaders. However, the CSAs did have access to written and digital communication from organizational leaders about project timelines and go-live plans. According to the CSA interviewee, the strategic goals of the organization directly linked to the implementation of the EMR and were communicated by team leaders and technical staff. The CSA staff member perceived the genuine environment of participation as confined to the CSA team and not certain that organizational leaders were trustworthy. The interviewee from the network team also could not elaborate about an environment of genuine participation for the entire workforce. However, the participant personally perceived organizational leaders as supportive and experienced an environment of genuine participation from leadership.

Conversely, out of all the teams interviewed, members of the Systems Analyst team partaking in the study were most confident with responses concerning leadership and their roles in solving issues impacting the entire organization during the change implementation. The Systems Analysts felt empowered to approach senior executives about issues impacting the overall success of the project. The Systems Analysts perceived the environment as one of genuine participation where ideas were recognized and individual employees were allowed to implement resolutions to problems. Systems Analysts consistently mentioned senior leaders' role during the announcements and official kickoff of the change implementation and received continuous involvement of

leaders throughout the project. Despite the exceptional leadership and the effective influence on change readiness as perceived by most study participants at the IT or the organizational level, the participants struggled to describe a culture that aligns individual employee behavior with organizational performance.

Culture Strategies

Research Objective 4: Determine the effect culture strategies have on individual change readiness as perceived by IT support staff.

Culture can be an enabler or complex obstacle to change readiness.

Organizational leaders must provide a culture which clearly identifies employee standards of behavior to enhance the ability to predict successful performance improvement during rapid change initiatives (Levin & Gottlieb, 2009). To determine the effect Haley's (2007) culture strategies of participation and anchoring have on individual change readiness, IT support staff were asked specific questions about leadership support, staff input, and willingness to contribute in future change initiatives. See Appendix B for questions 6, 7, and 8. Haley (2007) suggests that an environment of genuine participation provides opportunities for the workforce to contribute to the project and obtain feedback. The study participants were also asked about their perceptions of the culture concerning adoption of the change strategy or anchoring as it relates to the following:

1. Improved strategic change planning
2. Process monitoring
3. Consistency
4. Adequate resourcing for change in IT

The responses of interviewees regarding the effect culture strategies have on individual change readiness varied across teams as well as within the individual teams (see Table 14).

Table 14

Qualitative Collection for Culture by Roles

Roles	Themes
Customer Service Analyst	<p>Culture Strategies</p> <p>Participation</p> <ul style="list-style-type: none"> • Not sure there was a genuine environment of participation despite the multiple methods of communication <p>Anchoring</p> <ul style="list-style-type: none"> • Good feeling about project • Did not have good feeling in the beginning of the project • Resource not adequate • Witness unconditional leadership during go-live readiness through implementation • Would be willing to participate in future projects • Would participate and hope lessons learned by leadership would put quality above project timelines
System Analyst	<p>Culture Strategies</p> <p>Participation</p> <ul style="list-style-type: none"> • Allowed to implement suggested resolution to problem • Genuine environment of participation • No room for manipulating timeline • Not all encouraged to participate but leadership accepted suggestions and problem resolutions • Pursuit of timeline negatively impacted the quality of the project

Table 14 (continued).

Roles	Themes
Network Analyst	<p data-bbox="753 457 889 489">Anchoring</p> <ul data-bbox="802 495 1406 1094" style="list-style-type: none"> <li data-bbox="802 495 1192 527">• Good feeling about project <li data-bbox="802 533 1349 564">• Did not have good feeling in beginning <li data-bbox="802 571 1406 644">• Leadership support from announcement of project to implementation <li data-bbox="802 651 1406 724">• Resources not adequate on patient services teams <li data-bbox="802 730 1377 831">• Unconditional support by allowing workforce throughout the organization to travel to vendor site <li data-bbox="802 837 1390 911">• All levels of leadership traveled with staff to vendor site <li data-bbox="802 917 1365 991">• Would be willing to participate in future projects <li data-bbox="802 997 1406 1094">• Would participate and hope lessons learned by leadership would put quality above project timelines
Clinical Analyst	<p data-bbox="753 1136 984 1167">Culture Strategies</p> <p data-bbox="753 1173 919 1205">Participation</p> <ul data-bbox="802 1211 1406 1285" style="list-style-type: none"> <li data-bbox="802 1211 1406 1285">• Experience culture of genuine participation during go-live <p data-bbox="753 1291 889 1323">Anchoring</p> <ul data-bbox="802 1329 1406 1545" style="list-style-type: none"> <li data-bbox="802 1329 1333 1402">• Did not have a good feeling about the project <li data-bbox="802 1409 1349 1482">• Negative talk about not being ready for implementation of EMR <li data-bbox="802 1488 1406 1520">• Not sure if anchoring strategy was in place <li data-bbox="802 1526 1305 1558">• Would participate in future projects <p data-bbox="753 1583 984 1614">Culture Strategies</p> <p data-bbox="753 1621 919 1652">Participation</p> <ul data-bbox="802 1659 1333 1732" style="list-style-type: none"> <li data-bbox="802 1659 1333 1690">• Genuine environment of participation <li data-bbox="802 1696 1065 1728">• Negative leaders <p data-bbox="753 1738 889 1770">Anchoring</p> <ul data-bbox="802 1776 1159 1808" style="list-style-type: none"> <li data-bbox="802 1776 1159 1808">• Did have a good feeling

Table 14 (continued).

Roles	Themes
Patient Services Analyst	<ul style="list-style-type: none"> • Did not have good feeling in beginning of the project • No recollection of change planning and process monitoring • Would be willing participate in future project <p>Culture Strategies</p> <p>Participation</p> <ul style="list-style-type: none"> • Genuine environment of participation • Many efforts by leadership to get all of the workforce on board for this project • Multiple methods of communication by leadership but not enough due to aggressive timeline • No room for manipulating timeline • Leadership ‘Walked the Talk’ <p>Anchoring</p> <ul style="list-style-type: none"> • Anchoring not fully in place • Expecting systems improvements • Good feeling about project • Lack of resources not noted by leadership • Perceived organizational leaders to be more concerned with meeting deadline than producing a good product • Process monitoring not adequate • Unconditional support by allowing workforce throughout the organization to travel to vendor site • All levels of leadership traveled with staff to vendor site • Would be willing to participate in future projects because IT all about change

Table 14 (continued).

Roles	Themes
Information Systems Analyst	Culture Strategies Participation <ul style="list-style-type: none"> • Genuine environment of participation but not truly confirmed until go-live Anchoring <ul style="list-style-type: none"> • Good feeling about project but not in the beginning • Witnessed unconditional leadership during go-live readiness through implementation • Would be willing to participate in future projects

The interviewees did not appear confident in their responses and had difficulty responding to strategy specific questions. Participants took extra time phrasing responses and appeared somewhat anxious. The perception of the organizational culture by IT support staff varied by individual job classification and roles.

Consequently, twelve of the participants (n=14) had a “*good feeling*” about the project at some time during the P.R.I.D.E. project. Yet, the same participants questioned organizational leaders’ interest in the overall quality of the IT EMR project, not the quality of the implementation. The group acknowledged that at some point during the project the timeline appeared as organizational leaders’ ultimate priority. Although the project, was perceived as successful, the participants blamed the aggressive timeline for additional tasks, scheduling mishaps, and confusion during the EMR implementation. Specifically, indicating the culture strategy of anchoring was not fully in place.

Participants conveyed that an environment of genuine participation was experienced during the EMR project as long as the hardwired go-live date was not challenged.

Only one member of the Clinical Analyst team and a Network Analyst experienced negative feelings about the project. The Network Analyst's feelings about the project were clouded by negative informal remarks from individuals throughout the organization. The Network and Clinical Analyst recalled negative comments about the department's inability to meet project deadlines. There were individuals from all teams who were apprehensive in the beginning about the aggressive timeline and not sure the electronic medical record would be successfully implemented on the conceived due date. Participants throughout the teams were concerned about the aggressive timeline and the hardwired implementation date.

The interview discussions concerning the culture strategy of anchoring resulted in participants deliberating on improved project planning, process monitoring, and adequate resources. Participants voiced concerns about the effect Haley's (2007) culture strategies had on individual change readiness as perceived by IT support staff. Individuals from the CSA, systems, network, clinical, and patient services teams declared anchoring was not fully in place because of the lack of resources available to support task completion for various applications. The individuals noted that change planning was on-going, indicated by the open and multiple methods of communication. However, adequate resourcing during the P.R.I.D.E was lacking. Additionally, the analyst perceived process monitoring activities were conducted solely to ensure project timelines. Despite the multiple methods of clear and effective communication about the P.R.I.D.E. project, the CSA and a member of the clinical team were also unsure if the culture offered an opportunity to

provide input and receive feedback from leadership. Similarly, the participant from the clinical team perceived communication to the entire organization by organizational leaders as inadequate because of the aggressive timeline and its inability to be modified.

Other members of the systems, clinical and patient services teams participating in the study perceived the culture as one of genuine participation throughout the project. One Systems Analyst noted that even in instances when individuals were not encouraged to participate, suggestions for improvement and problem resolutions were accepted by organizational leadership. The CSA, information systems, and Network Analysts noted once the go-live readiness activities began and during the actual implementation of the EMR, an environment of genuine participation existed. As members of above teams, they were actively engaged during the P.R.I.D.E. needs analysis, design and development of the project but remained apprehensive about the change until go-live readiness activities began.

In spite of the individual beliefs and attitudes concerning the environment of participation and anchoring, all 14 participants of the study confirmed their willingness to participate in future change initiatives. One Clinical Analyst declared, “participating in future projects is inevitable because IT is about change”. Others concur with the Clinical Analyst by stating that “change was part of their jobs and despite their attitudes and beliefs they would be willing to participate in future initiatives”.

Systems, Clinical and Patient Service Analysts also confirmed willingness to participate in future projects by referencing the “*unconditional support*” of organizational leaders. The organization’s leaders exhibited commitment to the success of this project by allowing more than 65 members of the workforce to travel out-of-state to the vendor

site on four different occasions. The leaders also traveled with the employees and participated in various application build and meeting sessions. Additionally, three participants from the systems, network, and clinical teams shared continued willingness to participate in future change initiatives was linked directly to the idea of organizational leaders adhering to lessons learned concerning hardwired project deadlines. Consequently, 3 of the 14 study participants simply stated the unconditional support and commitment of organizational leaders offered to all personnel involved in this project made it “easy to commit to future endeavors”.

Summary

This chapter presents the results of the role of change readiness in supporting IT staff during the P.R.I.D.E project. Specifically, the results present the effect Haley’s six strategies: 1) open; and 2) multiple methods of communication; 3) visible; and 4) trustworthy leadership; 5) anchoring behavior; and 6) encouragement of individual have on the successful implementation of an EMR. The results supported the communication and leadership strategies. However, many participants voiced concerns about the culture. The concerns were specific to the hardwired go-live date, inconsistent process monitoring, inadequate resources, and access to senior leaders.

The organizational leaders employed open communication regarding the many facets of the P.R.I.D.E. project. Communication was delivered using multiple methods and perceived as accessible by all members of the IT department. The communication messages included reasons for the project, timelines, and other pertinent information. The IT personnel involved in the face-to-face interviews perceived the open and multiple methods of communication as positively impacting the success of the project.

The IT support staff perceived organizational leaders as visible and trustworthy. All 14 interviewees perceived the IT leaders as accessible and supportive. They felt safe engaging IT leaders with concerns and providing resolutions to problems. However, not all participants felt comfortable engaging senior leadership. Participants feeling uncomfortable when engaging senior leaders was particularly evident with members of the CSA team who communicated primarily with IT leadership members. Nevertheless, all members of the Systems Analyst team perceived all organizational leaders to be visible and trustworthy. Additionally, organizational leaders were perceived as pivotal to the success of the implementation of the EMR. Therefore, suggesting that the effects of Haley's strategies, communication, and leadership had a positive impact on individual change readiness as perceived by IT support staff.

The IT staff partaking in this study were not as confident responding to questions concerning culture strategies of participation and anchoring. The hardwired implementation date was instrumental in their wavering responses. However, all participants reported willingness to participate in future change initiatives in the organization.

CHAPTER V

DISCUSSION AND RECOMMENDATIONS

Summary of Results

In 21st century emerging economies, change remains constant and occurs at alarming rates. Organizations adopt strategies to ensure performance, improvement, and financial growth. These strategies introduce new organizational policies, complex technology, and human capital development changes. Despite necessity of the strategies, organizational leaders continue to encounter numerous challenges. The healthcare industry is not exempt from these challenges. In healthcare organizations, the economic climate has introduced electronic medical records, decision support software, hospital information systems, telemedicine, and health information networks (Appelbaum & Wohl, 2000; Haley, 2007). Implementation of these initiatives have a direct impact on IT staff in healthcare organizations.

This study analyzed aspects of change readiness for IT support staff during the implementation of an electronic medical record. This change readiness analysis occurred after the successful installation of a specific EMR in a healthcare system. Using Haley's (2007) six strategies for supporting helpdesk staff during rapid change, the study examined the effect communication, leadership, and culture have on the successful implementation of the EMR in a single organization.

The results of the qualitative study found the strategies of communication, leadership, and culture to have a positive impact on individual change readiness. Importantly, other information was discovered about the dynamics of the IT support staff specifically related to roles and responsibilities of the various teams. This chapter

discusses study findings, IT practices during change implementation, and their limitations.

Impact of Change Readiness on Successful Organizational Change

Thor et al. (2004) suggest 40% to 90% of all changes implemented in healthcare fail. Appelbaum and Wohl (2000) contend that change initiatives in healthcare organizations result in failure more frequently than successful change. Scholarly researchers of change argue that this happens as a result of employee resistance. According to Curtis and White (2002), resistance remains a factor complicating change processes and often results in unproductive activities within an organization. Kotter (1996a) suggests numerous organizational leaders fail to create a sense of urgency as the focal point of change remains on the outcome and not the individual employee. Readiness is at the opposite end of the spectrum from resistance when determining strategies for successfully managing rapid organization change.

Weber and Weber (2001) argue that planned readiness for change minimizes resistance to change. Planned readiness also provides an avenue to manage transformation. Increasingly, change research indicates that human resource management has become a very important aspect of successful organizational change (Appelbaum & Wohl, 2000; Haley, 2007; Wittenstein, 2008). Today's workforce expects a culture of genuine participation and anchoring which encourages improved strategic planning, process monitoring, and adequate resourcing (Haley, 2007).

According to change researchers, employee readiness is a critical factor in successful organizational change (Armenakis et al., 1993; Bernerth, 2004; Haley, 2007; Wittenstein, 2008). High levels of readiness are described in unification with

prescriptions for overall reduction in individual employee resistance (Armenakis et al., 1993; Wittenstein, 2008). Therefore, it is critical to understand the impact of change readiness on the successful implementation of organizational change.

This study focuses on individual change readiness strategies supporting IT staff during rapid organizational change. Specifically, the study determines the impact Haley's change readiness strategies have on IT support staff as a not-for-profit healthcare system implementing complex technology. As the climate of the healthcare industry evolves with its numerous government mandates, and emphasis on measurable outcomes and patient satisfaction scores, it is essential to discover ways to support successful change implementation (Appelbaum & Whol, 2000; Haley, 2007; Wittenstein, 2008).

Demographic Characteristics

According to the Bureau of Labor Statistics, only 27% of computer and mathematical workers are female with the median age of the American worker at 42.1 years old (Bureau of Labor Statistics, 2012). Hardy (2013) describes IT industry trends to include technology workers as young and male. Additionally, Hardy states "not surprisingly, the companies with older workers tend to be older companies and have a tendency to have a more experienced workforce" (p. 2).

Rosenbloom, Ash, Dupont, and Coder (2006) argues that women have not made significant gains in the workforce over the last decade but remain "under represented across a range of technical and scientific fields" (p. 1). Hardy (2013) concurs that technology is really a young man's game with the median age in some companies as low as 26 years old. In the present study, participation was dominated by females (57%). The demographics of the study participants does not represent that of the industry

standard. The average age of study participants was 52.5, much higher than industry standards for the IT field. According to Hardy, an older workforce represents a mature company with experienced workers.

Multiple Methods and Open Communication Strategies

The participants of the study perceived the communication strategies to have a positive impact on the success of the P.R.I.D.E. project. All participants agreed the message about the overall change, i.e., EMR implementation, was available to all involved staff. Armenakis et al. (1993), pioneers of change readiness, concur that the driving mechanism for creating readiness is the message. The change message should incorporate the need for change with details of the gaps between the current and future state. Change readiness researchers also concur that proactive attempts using the communication message can positively influence the beliefs, attitudes, and intention of the staff by motivating employees to willingly adhere to explicit behavior (Ajzen, 1991; Armenakis et al., 1993; Jimmieson et al., 2008).

According to study participants, continuous communication messages prepared individual employees for project engagement and support of change activities. The use of the communication strategies relates to the theory of planned behavior, which suggests knowledge and attitudes of individual employees supporting change enhances the ability to successfully implement organizational change (Ajzen, 1991).

The participants perceived the communication during the P.R.I.D.E project to be open and occurred through the use of multiple methods. The positive responses to the communication messages supported individual change readiness because they provided details about the overall need for the change initiative and explained why it was

important for all staff to actively participate in the change. The change message discussed patient satisfaction scores across entities within the organization and compared scores to national standards with the possible impact of sustaining competitive advantage for the healthcare organization. According to the participants, the change message encompassed how the change would assist the organization in adhering to government mandates. The message also provided project details, timelines, as well as employee expectations post implementation of the P.R.I.D.E. EMR. These expectations were consistently and explicitly linked to organizational strategic goals. To minimize the counteraction of the positive message, Armenakis et al. (1993) contend that change agents must be visible and assure employees the organization has the capability to achieve successful implementation of change.

Visible and Trustworthy Leadership Strategies

For several decades, researchers have explored individual employee perceptions of change readiness as it relates to organizational change. Some researchers refer to leadership research as somewhat obsessive because it has been studied virtually more than any other facet of human behavior (Higgs, 2002). Findings across IT support teams indicated a perceived relationship exists between effective leadership and individual change readiness. Despite the variation in the perceived levels of leadership support for IT support staff in the present study, the participants concur that key factors to the successful implementation included visible and trustworthy leadership. Many of the participants noted the confirmation of visible and trustworthy leadership did not necessarily occur during the conception and early beginnings of the project. However, at

some point, it occurred to participants that leadership, direct reports, or organizational leaders positively impacted the success of the project.

The successful implementation of the EMR as perceived by study participants suggests there were efforts by organizational leaders to acknowledge the value of individual employees during the change. Individual employees rely on their leaders to provide them with avenues of empowerment and purpose during change events (Kanter 1977; Wittenstein, 2008). By leaders embedding change readiness strategies, participants were empowered to modify design, and consequently, EMR systems build steps during the EMR project. The individual change readiness strategies were perceived as a mechanism to manage change. Wittenstein (2008) supports this idea by asserting that employees' perceptions of increased power promoted by organizational leaders provides individual employees the ability to successfully cope with change "a key aspect of readiness for change" (p. 131).

There were two exceptions noted by participants when discussing trustworthy and visible leadership which linked to the project's implementation date. Some participants perceived a barrier between staff and leadership regarding actual project go-live dates. The staff perceived there was no room to modify the go-live dates. Additionally, there were some participants who perceived specific groups to have more access to senior leadership than others.

Culture of Genuine Participation and Anchoring

Researchers suggest organizational culture and leadership are linked together in change processes (Haley, 2007; Sarros et al., 2008). The linkage of culture and leadership in change processes remains evident during change because leaders are

responsible for creating standards of behavior with venues for individual employees to obtain support resulting in successful change management. At the core of this process is the employee's capacity to take responsibility for change and the successful intended results. This process is equivalent to individual readiness for change (Levin & Gottlieb, 2009). A culture of genuine participation and anchoring should be conceptualized during the envisioning planning stages and monitored frequently during change to confirm its existence. Cultures are multi-layered and require realignment to encourage genuine participation and contribution from all involved personnel (Kotter, 1996a; Levin & Gottlieb, 2009; Wright & Thompsen, 1997).

The findings of this study indicate participants perceived a culture of genuine participation to exist as long as the hardwired go-live date was not challenged. Moreover, despite all participants' willingness to participate in future change efforts, depending roles and responsibilities, some perceived that anchoring was not fully in place during the change. Most participants perceived this linked to the hardwired go-live date and some limitations to resources. Participant's responses were based on Haley's strategy definitions for participation and anchoring.

Findings, Conclusions, and Recommendations

This qualitative study explored the effect communication, leadership, and culture strategies have on individual change readiness as perceived by IT support staff during the implementation of the P.R.I.D.E. EMR. According to respondents, the communication messages positively impacted the overall success of the EMR project. Messages were consistent and provided project details. There was genuine interactive communication between leadership and IT staff. Participants agreed the communication strategies,

multiple methods, and open communication were established and utilized throughout the project.

Organizational leaders were perceived by respondents to be visible and trustworthy. Executive and IT leaders participated in events contributing to individual change readiness. All leaders were accessible to staff, and most IT support staff felt safe participating and engaging with leaders.

During the interviews, when linking leadership and culture strategies to individual change readiness, participants seemed less confident in their responses. Some of them had to refer back to the definition of Haley's individual change readiness strategies to organize their thoughts. Some participants appeared anxious and had to be reminded there were no right or wrong answers. When referencing the definition of the culture strategies, participation and anchoring, some analysts perceived that anchoring was not fully in place. The effect of culture strategies, participation and anchoring, varied among teams based on roles and responsibilities.

This study proposes the following findings, recommendations, and conclusions:

Finding One:

Haley's (2007) strategies of communication and leadership were reported by IT support staff participants as positively impacting the successful implementation of the P.R.I.D.E EMR. Contrary to the positive impact of communication and leadership, some respondents perceived that the strategy of anchoring was not fully in place during the design and development of the P.R.I.D.E. electronic medical record (EMR). The perceptions varied across teams dependent on roles and responsibilities and were viewed

as directly related to the hardwired go-live date. The participants reported anchoring and participation as existing, providing the hardwired go-live date was not challenged.

Conclusion One: According to some respondents, the go-live dates are set by senior executives, and IT leadership does not accurately establish the individual employee's ability to successfully engage in the change. Some participants also report that project dates are hardwired and attached to other strategic endeavors which then take precedence over quality of the product implemented. Because the intricate facets of organizational culture are multidimensional and must be consistently realigned during change, hardwired project go-live dates could impact some participants' perceptions of Haley's (2007) strategy of anchoring.

Recommendation One: During the conception of rapid complex technological projects, key frontline IT support staff could be involved in setting major milestones and project timelines. Participating during initial planning of change could strengthen the effect of culture on individual change readiness as perceived by IT support staff. IT support staff participation during initial planning of change could help employees potentially become earlier adopters of change initiatives and enhance readiness. Individual IT staff could provide additional time to modify project timelines and go-live dates during the design phase. Consequently, dates would be hardwired in the design phase rather than the analysis phase.

Finding Two:

All participants perceived that the project was successful. However, depending on the roles and responsibilities of participants, the implications of the readiness strategies of communication, leadership, and culture varied. For example, the Systems

Analyst group felt empowered to access leaders and staff at any level of the organization. One of the Systems Analyst cited an example where the direct supervisor was accessible to assist with an issue impacting the entire organization, but the Systems Analyst had the opportunity to communicate with senior executives to get the issue resolved. The analyst was also comfortable communicating with senior leaders. The individual was familiar with the strategic goals of the organization and allowed nothing to stifle the progress of the change initiative. On the other hand, a member of the CSA team had access to communication but felt access to leadership was limited. Genuine participation and anchoring occurred within the confinement of the CSA department. However, The CSA agreed that all levels of leadership were essential to the overall success of the project but did not perceive senior leaders as accessible to the CSA team.

Conclusion Two: Leaders may be unaware that specific groups do not have access to them during the period of change readiness and implementation or are unaware of their ability to increase the level of change readiness for employees. Some groups had more access to higher level organizational leaders while others only felt comfortable working with direct reports. Accessible support from organizational leaders creates a climate of trust and transparency between front line staff and management (Haley, 2007).

Recommendation Two: In future organizational wide change efforts, high level leaders should personally engage staff at all levels. Some of the visits to the workplace should be scheduled and posted, providing all personnel with ample time to converse with senior leaders. Impromptu visits and face-to-face communication create perceptions that senior leaders are accessible to employees at all levels of the organization and can remove barriers to successful change implementation.

Limitations

This study took place after the implementation of the P.R.I.D.E. EMR. Participants were asked to think back 18 months to the change implementation period. The respondents may not have remembered the intricate details of events occurring during this time period. The project spanned over an 18-month period and was considered a rapid and complex technological implementation. Correspondingly, IT support staff may have confused the P.R.I.D.E project activities with other change processes as the organization continued engagement in other endeavors.

The setting of the study was the researcher's place of employment. The researcher assured participants that their answers would be kept anonymous and confidential. However, the participants may have also altered responses or failed to provide honest responses because they lacked confidence in the researcher's ability to provide anonymity and confidentiality. Respondents were colleagues of the interviewer and may have felt compelled to answer the interview questions as imagined necessary to complete research requirements. The setting and the researcher pose potential validity threats to the study.

The final limitation is that IT staff were encouraged to participate in face-face-interviews by the project sponsor, the Chief Operation Officer of the healthcare systems. Although the COO's involvement may have increased the response rate, there is possibility of treat to the validity and could have encouraged biased responses. Additionally, some of the participants may not have conveyed their true perceptions of the effects of communication, leadership, and culture on change readiness.

Recommendations for Future Research

The importance of individual change readiness continues to be highlighted in organizational change literature. Despite the available information, many organizational leaders lack the understanding to successfully implement change (Bernerth, 2004; Haley, 2007; Wittenstein, 2008). The following areas are recommended for future studies and research:

1. Create a change readiness assessment to identify the needs of IT staff during rapid organizational change (2007). This assessment would evaluate employee awareness, empowerment, and organizational support necessary embrace change. Additionally, the assessment could uncover resistance to change, create leadership alertness to gaps in readiness momentum, and increase ability to manage rapid implementation of successful change. Appelbaum and Wohl (2000) concur assessing readiness is critical to success because “the only sustainable competitive advantage today is the ability to change, adapt, and evolve” (p. 282).
2. Future research should be conducted to develop leadership tools that create awareness of staff needs during periods of readiness. The tools should include a mechanism for determining the individual employee’s capacity for change, accepting individual responsibility for intended change results (Wright & Thompsen, 1997). Additionally, the tool should provide a mechanism for conceptualizing anchoring during the planning phase of the project with continuous visits to the anchoring strategy during design, development, and implementation stages.

Conclusion

Organizations capitalizing on human capital development initiatives by acknowledging the value of individuals, must develop a climate of transparency and with trust between front line staff and leadership to create individual change readiness (Haley, 2007). This study proposed that embedding strategies of communication, leadership, and culture during rapid technological change could increase individual readiness, a key factor for successful management of organizational change. According to Bernerth (2004), readiness change models “provide organizations with an opportunity to generate positive change momentum” (p. 41).

In this study, all participants (n = 14) perceived the P.R.I.D.E project as successful. However, after reviewing the details of Haley’s (2007) change model and the effects on readiness, the participants perceived the strategy of culture to be inadequate primarily due to the hardwired go-live date. Perhaps, one explanation for the hardwired go-live date might include the driving forces of change in the healthcare industry: government mandates, requirements of healthcare consumers, and the need to maintain competitive advantage in a turbulent economic market. Due to the driving forces of change in the healthcare industry, organizational leaders may have been hard pressed to implement the electronic medical record within a specific timeframe. Therefore, organizational leaders could have been aware of the significance of the impact of individual change readiness on successful organizational change but unable to modify the hardwired EMR implementation date.

The findings of this study contributes to the body of knowledge on change readiness by indicating that Haley’s (2007) change model of communication, leadership,

and culture can support IT staff during rapid implementation of organizational change. However, the effects of the culture on individual change readiness were weakened because of the leadership's hardwired go-live date. The hardwired go-live date was perceived as erecting barriers to genuine participation and anchoring activities that were not fully in place during the change implementation.

Future IT or other organizational change endeavors must focus on establishing a culture of genuine participation and anchoring, affording all staff the opportunity to provide input during the envisioning stages of complex technological changes. Acknowledging the value of human capital and awareness of employees' ability to embrace change during visioning of change indicates that leaders are aware of the organizational culture, the significance of individual change readiness, and the impact on successful change. Additionally, organizational culture of participation and anchoring can be a determinant of innovation and successful change but is dependent on the degree to which individual employees perceive support and encouragement from leadership.

APPENDIX A
IRB APPROVAL LETTER



INSTITUTIONAL REVIEW BOARD
118 College Drive #5147 | Hattiesburg, MS 39406-0001
Phone: 601.266.6820 | Fax: 601.266.4377 | www.usm.edu/irb

NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months. Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: **13091205**
PROJECT TITLE: **Assessing Change Readiness Practices for Information Technology Support Staff**
PROJECT TYPE: **Dissertation**
RESEARCHER(S): **Dianna Perkins**
COLLEGE/DIVISION: **College of Science and Technology**
DEPARTMENT: **Human Capital Development**
FUNDING AGENCY/SPONSOR: **N/A**
IRB COMMITTEE ACTION: **Expedited Review Approval**
PERIOD OF APPROVAL: **09/24/2013 to 09/23/2014**

Lawrence A. Hosman, Ph.D.
Institutional Review Board

APPENDIX B

COPYRIGHT PERMISSION DR. D. BOUCKENOOGHE

From: Dave Bouckenooghe [mailto:dbouckenooghe@brocku.ca]

Sent: Tuesday, February 05, 2013 10:35 AM

To: Perkins, Dianna J.

Subject: RE: Dianna J. Perkins: The University of Southern Mississippi

Dear Dianna,

Hereby I acknowledge you can use my instrument OCQ-CPR towards your research without having to pay any fees.

Kind regards,

Dave Bouckenooghe

From: Perkins, Dianna J. [mailto:dperkins@lgmc.com]

Sent: Thursday, January 31, 2013 5:59 PM

To: Dave Bouckenooghe

Subject: Dianna J. Perkins: The University of Southern Mississippi

Hello!

I am doctoral student at the University of Southern Mississippi at the Gulf Coast campus.

I am working on my dissertation and would like to request permission to use questions

from the article, Organizational Change Questionnaire-Climate of Change, Processes, and

Readiness: Development of a New Instrument, in my study.

My student status can be validated at The University of Southern Mississippi and the chairman of my committee is Dr. H. Annulis. Please note that I have included Dr.

Annulis' contact information.

I look forward to hearing from you.

Heather M. Annulis, Ph.D., CPLP
The University of Southern Mississippi
Associate Professor & Assistant Director
Jack and Patti Phillips Workplace Learning and Performance Institute
730 E. Beach Blvd.
Long Beach, MS

Dianna J. Perkins

Information Systems
Informatics Education Coordinator
dperkins@lgmc.com
337-289-8826

APPENDIX C

SEMI-STRUCTURED INTERVIEW QUESTIONS

-
1. Prior to the P.R.I.D.E. project, did you have good feelings about the change or were you quite reluctant to accommodate and incorporate the change into your work?
 - 1.1. If yes, what were your feelings about the change and what necessary task/s was incorporated into work?
 - 1.2. If no, why?
 2. During the P.R.I.D.E. project, were you regularly informed on how the change was going?
 - 2.1. If yes, what was the method/s of communication?
 - 2.2. If no, why not?
 3. Was there clear effective communication between project leaders and IT support staff about the organization's policy toward the P.R.I.D.E. project?
 - 3.1. If yes, what was the method/s of communication?
 - 3.2. If no, why not?
 4. Did senior executives clearly explain the necessity of the P.R.I.D.E. project and remain actively involved through the implementation of the EMR?
 - 4.1. If yes, what methods of communication was used to explain the details of the project and describe leadership involvement?
 - 4.2. If no, why not?
 5. Throughout the P.R.I.D.E. project, when you experienced any problems could you always turn to your manager for help?
 - 5.1. If yes, what problems did you experience and how were you assisted?
 - 5.2. If no, why not?
 6. Has change such as the P.R.I.D.E. project always discussed with all employees concerned and IT leadership encouraged personal input?
 - 6.1. If yes, what was the essence of your participation?
 - 6.2. If no, why not?
 7. Senior executives support the change process unconditionally.
 - 7.1. If yes, what are example/s of unconditional support during the P.R.I.D.E. project?
 - 7.2. If no, why not?
 8. Were you employed in the IT department during the planning and implementation of the P.R.I.D.E. project?
 - 8.1. If yes, what was your role and job classification?
-

APPENDIX D

INITIAL LETTER FROM PROJECT SPONSOR

Dear _____:

Dianna Perkins is a doctoral student at The University of Southern Mississippi. To complete her research, she needs members of the Information Systems Department to participate in a face-to-face interview. The purpose of her study is to explore change readiness strategies that support IT staff through rapid organizational change.

As the project sponsor, I am hopeful that you will participate in this study. In order to obtain meaningful results, Dianna needs your help. Your participation in this study will remain anonymous and you will not be associated with any identifiable data. The interview should only take 20 to 30 minutes. All persons completing the interview process will be entered into a drawing for a \$100.00 Visa gift card.

Thank you in advance for your support. You will receive a letter with instructions for participating. Please contact Dianna Perkins at perk512@bellsouth.net or 337-962-5402 with additional questions.

Sincerely,

Project Sponsor

APPENDIX E

LETTER #2 RESEARCH PARTICIPATION

Dear _____:

I need your help! I am a doctoral student at The University of Southern Mississippi. To complete my doctoral research I need Information Systems staff to complete 20 – 30 minute face-to-face interviews about change readiness strategies. You may remember receiving a letter from my project sponsor, requesting your participation. Interviews can be scheduled now.

Please complete the enclosed postcard or contact me directly to set up an interview. Your participation in this study will remain anonymous and will not result in any identifiable data or documents. Individuals participating in the study will be eligible to participate in drawing for a \$100.00 gift card.

Your participation is greatly appreciated! I look forward to hearing from you. Thank you for your assistance.

Sincerely,

Dianna J. Perkins
Doctoral Candidate
perk512@bellsouth.net
337-962-5402

APPENDIX F

POSTCARD INTERVIEW APPOINTMENT

SIGN UP NOW for your interview! The face-to-face interviews about change readiness strategies will only take about 20 – 30 minutes. Call **Dianna Perkins** to confirm your date and time. Thank you in advance for your participation!

Contact Information:

Dianna J. Perkins

perk512@bellsouth.net

337-962-5402

APPENDIX G

FOLLOW-UP EMAIL FROM PROJECT SPONSOR

To:

From: Project Sponsor

Dianna Perkins needs your help! She is still in need of study participants and the project deadline is drawing near. The last day to participate in an interview is _____. As noted in previous correspondence, your participation in this study will assist with the exploration of change readiness strategies that support IT staff through rapid organizational change. Individuals participating in the study are eligible to win a \$100.00 gift card. Don't miss your chance to participating in the drawing.

Thank you in advance for your support. Please contact Dianna Perkins at perk512@bellsouth.net or 337-962-9602 to schedule an interview time.

Kind regards,

Project Sponsor

APPENDIX H
INTRODUCTION SCRIPT

Thank you for your participation in this research study. Prior to beginning the interview, I must ask a series of questions to confirm that you meet the criteria for participating in the study. The questions are as follows:

- 1) Were you employed and working in the IT department during the 18 months prior to implementation of the EMR?
- 2) Were you employed and working in the IT department prior to and during the implementation of the EMR?
- 3) Were you a member of the leadership team prior to or during the implementation of the EMR?

Now that the criteria for inclusion has been established, we will begin with the purpose of the study documented on the form in your packet entitled *Oral Presentation for Informed Consent*. The *Oral Presentation for Informed Consent* also includes the description of the study, benefits, risks, confidentiality, alternative procedures and participant's assurance. The purpose of this study is to understand the role of change readiness in supporting IT staff during the P.R.I.D.E. project. Specifically, I am interested in Haley's change readiness strategies for helpdesk staff which includes the following strategies; 1) open and 2) multiple methods of communication, 3) visible and 4) trustworthy leadership, 5) anchoring behavior and 6) encouragement of individual participation. Please review with me the document entitled *Oral Presentation for Informed Consent*. Please note that Haley's change readiness practices for help desk support staff are included in the *Oral Presentation for Informed Consent*. The questions

asked during this interview process are directly correlated to Haley's six strategies. Now that the logistics of the interview process have been completed, please sign the informed consent form included in your packet as we begin the interview. A copy of the informed consent form will be given to you.

During the P.R.I.D.E. project clinical and revenue management applications were built and implemented within an 18-month timeframe. The questions asked during this face-to-face interview will specifically explore the impact that communication, leadership and culture has on individual change readiness. Please reflect on your personnel experiences during the P.R.I.D.E. project. To answer the questions you will need to think back to the announcement of the project made by the COO. The announcement included the project's aggressive timeline, guiding principles, and the impact the implementation would have on the organization. Please think back to the planning meetings, multiple trips to Kansas City and the implementation of the EMR. Understand there are no right or wrong answers. I am very interested in your experiences and encourage you to relax and speak freely while answering the questions.

The interview will take approximately 30 minutes. You can stop the interview at any time and withdraw from participating in the study. As the researcher, I will be taking notes as well as recording the interview to ensure accurate data is transcribed. By consenting to participate in the interview you consent to having your responses recorded. As previously mentioned, you will be assigned a participant number not linked to any personal identifiers. The participant's personal identifier will not be included in any data in the project's final report. Only the researcher will have access to data gathered for the purpose of completing doctoral research requirements.

However, to provide basic demographic information for this study I must confirm your gender, race, and job classification. The packet provided includes a list of the questions for you to follow along during the interview. At the end of our interview, please complete the enclosed card for a chance to win a \$100.00 Visa card.

APPENDIX I

ORAL PRESENTATION FOR INFORMED CONSENT

1. Purpose: The purpose of this study is to understand the role of change readiness in supporting IT staff during the P.R.I.D.E project. Specially, I am interested in Haley's change readiness strategies for help desk staff which include the following strategies:

Haley's Six Strategies for Help Desk		
Communication	Multiple Methods	Timely and relevant information sharing about the nature and reason for change using various methods such as email, face-to-face, forums, workshops, websites, and staff meetings.
	Open	Genuine interactive two-way communication between staff and leadership using sub-processes of persuasion, information sharing, mediation, conflict resolution, listening and collaboration.
Leadership	Visible	Accessible supportive to staff by being visible change agents and informal change champions, "walk the talk"
	Trustworthy	Staff wants to feel safe to participate and engage with leadership. Important to develop a climate of trust and transparency between front line staff and management.
Culture	Participation	Genuine participation affording staff the opportunity to provide input and receive feedback from leadership.
	Anchoring	Adopting improved strategic change planning, process monitoring, consistency, and adequate resourcing for change in IT.

2. Description of Study: Face-to-Face interviews requiring 20 – 30 minutes will be completed by IT staff meeting inclusion criteria. The interview will occur in a quiet office in the IT department.
3. Benefits: Study participants completing face-to-face interviews will not receive any benefits except eligibility for a \$100.00 gift certificate.
4. Risks: There are no identifiable risks to participants in this study. Responses obtained during the face-to-face interview will not be associated with any

personal identifiers. Therefore, no one will be able to identify participants or their responses to the interview questions.

5. Confidentiality: Confirmed participants will be assigned a participant number not linked to any personal identifiers. All information gathered will be linked to the interview number. Only the research will have access to data gathered for the purpose of completing doctoral research requirements.

6. Alternative Procedures: N/A

7. Participant's Assurance: Project participants may withdraw from this study at any time. This project has been reviewed by the Human Subject Protection Review Committee at The University of Southern Mississippi. This committee ensures that all projects utilizing human subject follow federal regulations. Any questions concerning the rights of research participants should be directed to Institutional Review Board at 601-266-6820. Any questions concerning this project should be directed to Dianna J. Perkins at 337-962-5402.

Signature of Researcher Providing Oral Presentation

Date

APPENDIX J
INFORMED CONSENT

THE UNIVERSITY OF SOUTHERN MISSISSIPPI
AUTHORIZATION TO PARTICIPATE IN RESEARCH PROJECT

Participant's Name _____

Consent is given to participate in research project entitled ***Assessing Change Readiness Strategies for Information Technology Support Staff***. All procedures to be followed were explained by Dianna J. Perkins. Information provided in participant packet includes the purpose, study description, interview questions, benefits and risks.

Participants are encouraged to ask questions about research protocol and may withdraw from the study at any time. All information gathered from the interview process is confidential. Participants will be assigned a participant number not linked to any personal identifiers. All information gathered will be linked to the interview number. Only the researcher will have access to data gathered for the purpose of completing doctoral research requirements.

Please contact Dianna J. Perkins with any questions concerning this research project.

Signature of participant

Date

Signature of Researcher

Date

APPENDIX K

INTERPRETATIVE PHENOMENOLOGICAL ANALYSIS

Initial Comments		
Questions from original transcript	Responses	Exploratory Comments
<p>Q1. Were you employed in IT Department during the planning and implementation of the P.R.I.D.E. project?</p> <p>Q. And what was your role and job classification?</p> <p>Q2. During the P.R.I.D.E. project, were you regularly informed on how the EMR implementation was progressing?</p> <p>Q. And so, we say yes, could um expound or um give more detail about what were the methods of communication that were used during the project?</p>	<p>R. Yes</p> <p>R. Role was uh interface analyst</p> <p>R. Yes</p> <p>R: I guess we started off with uh initially with, with email and just in interoffice types of communication from management to the staff. Uh, that was then expanded upon with uh several meeting with staff from the Cerner uh client who came on site and uh had group meetings with uh fellow employees and a Center staff who came down and pre provided presentation uh at that time. Uh there were several meeting, uh that were then broadcast to the, hospital uh where the, the project and the timeline was, was sort of laid out as to what the hospital's uh</p>	<p><i>Member of system team responsible for system HL7 interfaces</i></p> <p><i>Method of communicated noted: Initially email, interoffice types of communication from management to staff</i></p> <p><i>Participant confident when responding</i> <i>Participant perceived communication as adequate</i></p>

<p>Q3: Was it clear and effective communication between the project leaders and the IT support staff?</p>	<p>implementation and overall uh picture would look like at that time.</p>	
<p>Q4: Did senior executives clearly explain the necessity of the P.R.I.D.E Project and remain actively involved in the implementation of the EMR?</p>	<p>R. Yes</p>	
<p>Q5. Throughout the P.R.I.D.E project, if you experience problems, could you turn to your managers for help</p>	<p>R. Yeah, project leaders were uh filtering out message that they passed down to staff to communicate the uh, the project and some of the responsibilities by the different IT staff</p>	<p><i>Emphasizing the desire of the leader (filtering information) to ensure clear and concise communication</i></p>
<p>Q6. Was the P.R.I.D.E project discussed with all employees involved and did IT leadership encourage input?</p>	<p>R. Yes The manager was a, a pivotal uh person in getting a lot of issues resolved because of the way the department is configured</p>	<p><u><i>Manager was, a pivotal uh person; recognized that management was essential to the overall success.</i></u></p>
<p>Q7. Did the senior executives support the P.R.I.D.E process unconditionally?</p>	<p>R. Yes in, in the early stages of the project uh we, we had some involvement with senior executives. As the project r uh began to progress, uh there was less involvement I would say, from, from my perspective. We had our, our own AVP, who is housed in our department. So, that, that individual was, was here and present and always was a line of communication...</p>	<p><i>Leadership was visible and trusted to assist with problem resolution across teams</i></p>
<p>Q7. Did the senior executives support the P.R.I.D.E process unconditionally?</p>	<p>R. I would say they did. Although it, it you had a sense that the, the project was already road mapped so</p>	<p><i>I would say they did; There was a timeline, diagram Participant following</i></p>

<p>Q8. Did you have a good feeling about the EMR implementation and would you be willing to contribute in future initiatives?</p>	<p>to speak... There was a timeline..So you were basically kind of following uh, uh a diagram or uh a preplanned uh, effort.</p> <p>R. They communicated regularly Several visit by management of senior executives taking a pulse on you specifically Leadership involvement key making sure that we met “go live date</p> <p>R. I, I would say yes. ...Having the ability to change as needed or the customization (develop, design, and implement) that we had at on site, it afforded me the ability to express my knowledge and skills.</p>	<p><i>roadmap and perceived some discussion to solely for setting out the expectation to following project design and timeline</i></p> <p><i>“go live date” (preplanned roadmap)</i></p> <p><i>The participant shares because the role of an interface analyst is not cookie cutter so to speak, he was allowed to genuinely participate in the project. Therefore, would willingly participate in future change efforts</i></p>
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