LEADERSHIP STYLES: A PHENOMENOLOGICAL STUDY OF TRANSFORMATIONAL, TRANSACTIONAL, AND SITUATIONAL LEADERSHIP STYLES EMPLOYED BY CIOs AT MILITARY COMBATANT COMMANDS

by

Eric T. Hollis

CALVIN LATHAN, Ed. D., Faculty Mentor and Chair

JOHN GRILL, Ph.D., Committee Member

DAVID STEIN, Ph.D., Committee Member

Barbara Butts Williams, PhD, Dean, School of Business & Technology

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Abstract

Chief information officers (CIOs) are the focal points for information management in a variety of domestic and global organizations. Effective and efficient leadership is paramount in executing the organization's strategic plans and global visions. Historically, a vast amount of research has been conducted on leadership styles of CIOs in the civilian workplace. However, research pertaining to leadership styles displayed by CIOs at military combatant commands is lacking or there has been a relative small amount of research conducted. This research focused on the gap in leadership studies of CIOs at military combatant commands and employs three research questions to ascertain which leadership style is more effective for leaders. This qualitative phenomenological study was conducted at the four highly skilled, global, and operational military commands locate on a U.S. Air Force base. In particular, this research study discussed the effectiveness of transformational, transactional, and situational leadership styles of personnel working within the CIO directorate in accomplishing tasks or goals.

Dedication

First, allow me to give thanks to God, for allowing me to begin and finish this long and challenging journey. Next, I would like to dedicate this dissertation to my wife Rabiah, (love you) and LWB whose love and support has been unyielding during the entire Ph.D. process. Lastly, I would like honor my mother Christine and my brother Isaac Hollis III whom have both since passed, but were very inspirational in my daily life and I truly miss and love you both.

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CHAPTER 1. INTRODUCTION

Introduction to the Problem

The effective use of leadership styles is paramount for organizations to achieve their objectives. According to Bucic, Robinson, and Ramburuth (2010), the particular leadership style displayed by the team leader affects cohesion, perception, and performance of the team. In today's global and digitally connected workplace, a leaders' particular style of leadership can propel or impeded an organization's motivation. Notwithstanding, in military organizations, especially at combatant commands, the effective use leadership styles could mean success or failure of the command's missions, objectives, and possibly result in the loss of lives. Therefore, a leader's ability to motivate and inspire their followers is integral in task or goal accomplishment.

Chief information officers (CIOs) within civilian organizations are responsible for leading their information technology (IT) teams and ensuring their organizations have state-of-the art, reliable and robust IT infrastructure to remain competitive in the global workplace. However, CIOs at military combatant commands are subjected to a different set of variables when leading their IT teams. For instance, at combatant commands, CIOs must perform the aforementioned duties described in civilian organizations, in addition to leading their IT teams during both peace and during highly complex military global operations. This study will provide an insight, analysis, and fill a gap pertaining to leadership studies on transformational, transactional, and situational leadership styles of CIOs at military combatant commands.

Background of the Study

Research has shown that there has been a plethora of studies on leadership styles of CIOs in the civilian sectors describing their effectiveness within their organizations (Glaser, & Kirby, 2009; Preston, Leidner, & Chen, 2008; Peppard, Edwards, & Lambert, 2011); however, there is has been a small amount of research conducted on CIOs at military combatant commands. Subsequent studies (Derue, Nahrgang, Wellman, & Humphrey, 2011; Korkmaz, 2007) highlight that leadership traits effect motivation and inspiration of individuals within organizations. In today's globally fast paced and digitally connected workplace, a leader's particular style of leadership is integral in inspiring their employees to perform. The seminal studies on leadership were first conducted by (Murphy, 1941) with his study on leadership styles of workers at Civilian Conversation Corps Camps. According to Murphy, "leadership is not a static thing; it is an immutable aspect of personality" (p.2).

Leadership styles in military organizations are normally on the same par as leadership styles in the civilian sectors; however, at combatant commands the leadership style of the leader is critical to accomplishing the mission or meeting the desired objective. Further, early studies on leadership (Greenwood & McNamara, 1969) revealed that within business organizations, leaders displayed leadership traits that promoted team cohesiveness and a desire for individuals to excel in their particular jobs. For example, leaders who instill teamwork and effective communications within their followers have a positive influence throughout the organization which leads to followers feel as if they are an integral part of the organization. In the same vein, for military combatant commands,

being an integral part of the team is paramount to unit success and mission accomplishment.

Chief information officers (CIOs) in civilian organization leadership styles are expected to lead their organizations in technological advances by "demonstrating how IT makes a difference and impacts the top or bottom line" (Jones, 2011, p.1) to ensure their organization has a competitive advantage in the marketplace. However, the positions of CIO/CTO are relative new in the world of corporate management and titles. According to Karanja and Zaveri (2012), the roles and duties of other top tier executives ─ such as Chief executive (CEOs), Chief financial officers (CFOs), Chief operating officers (COOs), and other members of the top management team have been prominent for years in a variety of organizations. In the same vein, the leadership styles of CIO/CTOs in recent years have grown to become an integral and highly desired member of the management team.

Statement of the Problem

Research has shown that leaders employ a variety of leadership styles to include transformational, transactional, and situational leadership in executing their duties and responsibilities. Transactional leaders inspire their supporters by regulating their actions and rewarding agreed-upon actions, while transformational leaders mobilize their supporters by creating and articulating a vision that transforms their supporters mind-set for the benefit of the organization (Groves & LaRocca, 2001; Parolini, Patterson, & Winston 2009). Further, situational leaders lead their followers based on the current situation at hand and can vary their leadership style to match the current task at hand.

There has been a vast variety of research studies conducted on CIO leadership styles in the private sectors (Deevi, 2011; Gilbert, Pick, & Ward, 1999; Grover, Karahanna, & El Sawy, 2011; Harris, 2011), there appears to be very little research conducted on CIOs in military combatant commands. The problem under investigation for this study is to describe which leadership style has been more effective for CIOs at combatant military commands military during the post 9/11 era.

Purpose of the Study

The purpose of this phenomenological study will be to describe transformational, transactional, and situational leadership styles employed by five CIOs at combatant commanders located at a U.S. Air Force base. According to Bass (2008), the leader of an organization can change employees' mindset, comprehension, and focus to deal with the assigned task, or conversely, the employees' motivation to cope with the task. In today's global and every changing environment juxtaposed with the constant military forces being deployed to foreign lands, leadership continues to be an integral factor in preparing followers to deploy. This study will fill a gap pertaining to research conducted on leadership styles of CIOs at combatant commands and add to the growing body of knowledge of CIO leadership studies.

Rationale

CIO effective leadership is paramount in the successful integration of new technology and maintain a competitive edge of their organization in the global workplace (Armstrong, Simer, & Spaniol, 2011; Laplante, & Costello, 2006; Weiss, & Anderson, 2004). Not only does the leadership style and management of the CIO have an effect on

the organization as a whole, their particular acceptance and implementation of new technology is integral for the organization to succeed.

Arguably, there has been a plethora of research conducted to address CIO leadership styles in the corporate world, and these studies have given as insight to a variety of leadership and management styles; however, they have not fully addressed the CIOs within military organizations. This research study reinforces the need for a more in-depth description of leadership styles employed by CIOs in military combatant commands. CIOs within any organization must project business acumen, a clear vision of developing technology, and the added value of that new technology within the organization (Harris, 2011; Mahoney, 2009).

Research Questions

The purpose of this qualitative research study is to determine the most effective leadership style displayed by CIOs at military combatant commands. In an attempt to make the aforementioned determination, the following three research questions will be addressed.

Research question 1: What are the intrinsic motivating factors that influence CIOs to employ transformational leadership style?

Research question 2: How do followers respond to extrinsically motivation from transformational leaders vice transactional leaders?

Research question 3: What is the effect on task accomplishment in military organizations where CIOs employ situational leadership versus transformational leadership styles?

Significance of the Study

In today's fast-paced, mobile, and global workplace entrenched with every growing need for advanced information technology, leadership is paramount for ensuring organizations are prepared for technological advancements. This study will focus on the leadership styles of CIOs in military combatant commands and concurrently add to the growing body of knowledge pertaining to CIO leaders at military combatant commands. Further, this study will illuminate the need for more studies involving leadership styles at military organizations and particularly fill a gap of research conducted on CIO leadership styles.

Definition of Terms

CIO: Chief information officer is an individual responsible for the research, development, and the implementation of new Information technology throughout their organization.

Combatant Command: A military command(s) that has been authorized to take both offensive and defensive military actions on enemy combatants of the United States or its allies.

CTO: The term, in a vast majority of organizations is interchanged with the CIO.

Situational Leaders: Situational leaders employ of variety of leadership styles depending on the current sense of urgency the situation dictates.

Transactional leaders: Transactional leaders solicit a particular action from their followers, and the followers will complete the task or meet the objective, but only if they are receive an agreed upon accolade in return.

Transformation leaders: Transformational leaders motivate and transform their followers to have personal desire to produce desired results within the organization.

Assumptions and Limitations

Assumptions

This study was conducted with the premises that each participant has served or has worked in a military organization and practices or has practiced a variety of leadership styles throughout their careers. According to Bass (1978), "leadership is often the single most critical factor in the success of failure of institutions" (p.11). Further, the researcher assumed that each participant was forthright in describing and detailing their lived experience as CIOs in a leadership role within a military organization.

Limitations

Limitations in this study include the inclusion of only five combatant commands located at a U.S. Air Force base. Further the sampling size, using only CIOs at military installations and not the entire population of CIOs, not having a true representation of all CIOs at military installations. According to Bourgeault (2012), interpretive research is an integral instrument; however, only if it is used correctly. Additionally, this was the researcher's initial experience with conducting a qualitative study, and by this admission alone is a limitation in the study. Further, since all the CIO/CTOs interviewed worked in a secure building where recording devices are not allowed, this was a limitation due to the inability to record interviews for more accuracy.

Theoretical/Conceptual Framework

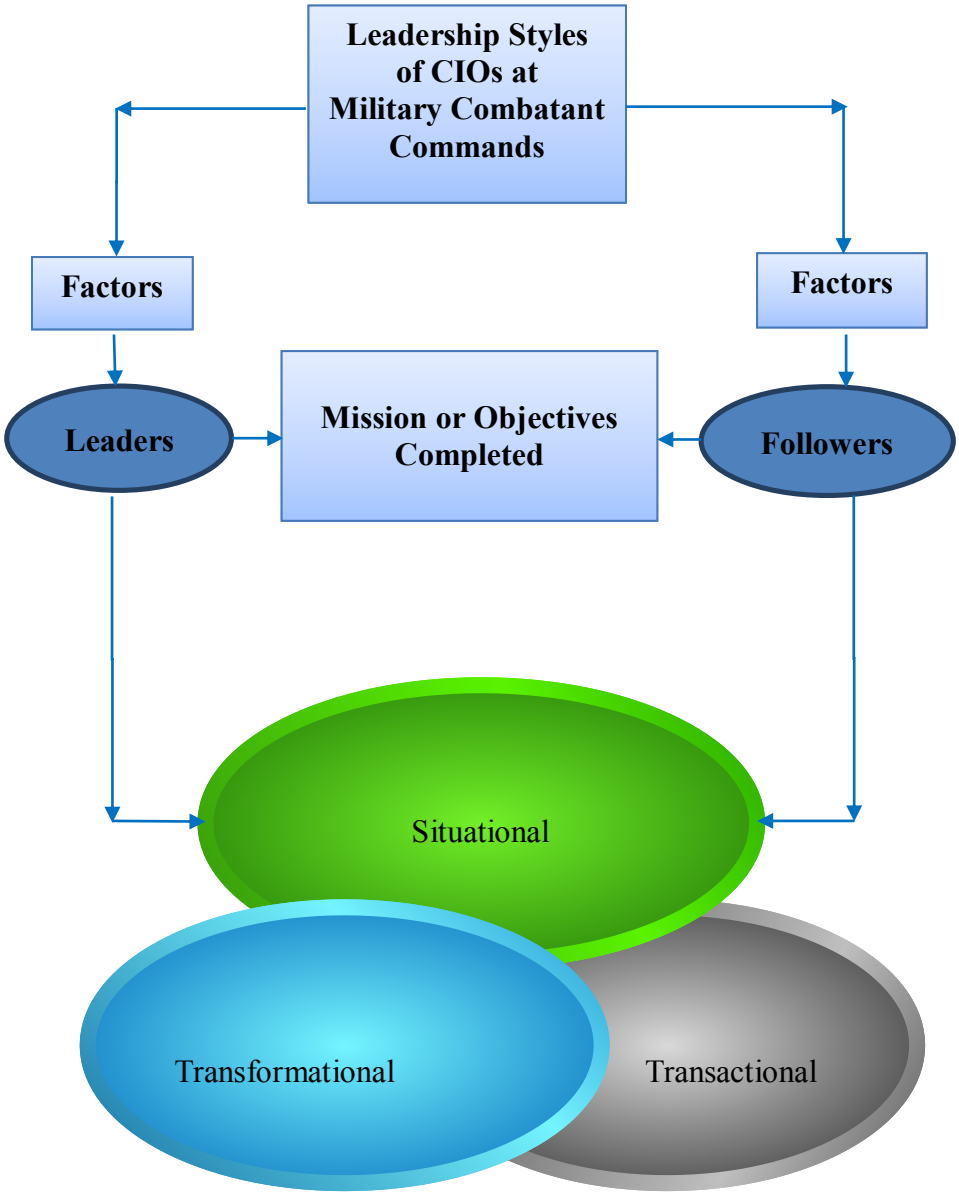

Figure 1. Factors that affect the leadership styles of CIOs at military combatant Commands. Successful completions of the CIO's missions or objectives are integral to the leadership style within the organization.

Organization of the Remainder of the Study

Chapter one highlights the leadership styles of CIOs and particularly discusses three leadership-transformational, transactional, and situational as pertaining to CIO leadership styles at military combatant commands. Chapter two is the literature review and examines both seminal works and current studies on leadership styles of CIOs in both civilian and at military commands. Further, this chapter brings into light the various studies on leadership and underscores why a phenomenological study on CIO leadership styles at combatant commands is paramount.

Chapter three underlines the research methodology for the research study and illuminates the methodology employed and adheres to set standards for qualitative phenomenological study. Moreover, this chapter captures the sampling pool, data gathering, and interpretation during the process. Chapter four encompasses the collection and analysis of the data obtained in the research study. Chapter five are the findings, results of the study, limitations, and recommendations for future research pertaining to leadership styles of CIOs at military combatant commands.

CHAPTER 2. LITERATURE REVIEW

Introduction

This literature review highlighted leadership styles of CIOs. In particularly, this study focused on transformational, transactional, and situational leadership styles of CIOs at military combatant commands. The seminal studies on leadership were first conducted by (Murphy, 1941) with his study on leadership styles of workers at Civilian Conversation Corps Camps. According to Murphy, "leadership is not a static thing; it is an immutable aspect of personality" (p.2). Additionally, Greenwood and McNamara (1969) conducted research on organizational managerial leadership traits within business organizations. The underpinnings for recent leadership styles are linked to Bass (1978), as he highlighted both transformational and transactional leadership styles used by effective leaders. Burns (1978) argued that all leadership is objective-focused, and the abortive attempt to set objectives is an indication of substandard leadership. As an example, leadership in military organizations that do not have clearly defined goals often find themselves with motivation and moral challenges within their organization.

This qualitative phenomenological study was selected to capture the participants' experience pertaining to leadership styles in military combatant commands. Additionally, this research will analyze and evaluate literature pertaining to leadership styles to ascertain which of the three aforementioned styles employed by CIO/CTOs are most effective within their organizations. In the same vein, this literature will fill a gap on research highlighting leadership studies of CIOs/CTO at military combatant commands.

Leadership Styles

Leadership styles in organizations can have a positive or negative effect on morale, followers, and the organization's strategy and vision. As noted by Mihelic, Lipicnik, and Tekavcic, (2010) leadership pertains to a relationship a leader and their subordinates within a particular situation and organizational construct. Leaders must possess the ability to motivate and inspire their followers to obtain the goals and objectives in order to remain competitive in the workplace. According to Bucic, Robinson, and Ramburuth (2010), the particular leadership style displayed by the team leader affects cohesion, perception, and performance of the team. For example, leaders with effective leadership styles enables their followers to think outside the "box" and thus become more creative within the organization and promote an environment that is conducive for teamwork.

Chief information officers (CIOs) in organizations are the focal point for providing integral leadership within their teams to provide reliable, robust, and state-of-the-art information technology to ensure the organization has and maintains a competitive edge in the workplace. In the global and digitally connected workplace of today, CIO/CTOs must have the ability to not only influence their subordinates; they must be influential among their peers and senior management in order to succeed in meeting their objectives (Deevi, 2011; Enns, Huff, & Higgins, 2003; Karanja & Zaveri, 2012).

Transformational Leadership

Transformational leaders motivate and transform their followers to have a personal desire to produce positive results within the organization. In the same vein,

transformational leaders guide their followers by providing a comprehensive vision and inspiration to look beyond individual needs to better the good of the team and organization (Groves & LaRocca, 2011; Willink, 2009). Further research has shown that transformational leaders shape and provide intellectual stimulation for their workforce (Bryant, 2003; Colbert, Kristof-Brown, Bradley, & Barrick, 2008; Goertz, 2010; Weichun, Sosik, Riggio, & Baiyin 2012). For example, transformational leaders' ability to get their team members to become inspired and motivated will yield positive results in today's competitive and global marketplace.

Transformational leaders are paramount in any organization that desires to succeed by influencing and motivating their entire workforce especially in a higher learning institution. According to Abouelenein and Diala (2012), leadership is regarded as an integral component of a community college organization. Moreover, CIOs play a direct role in influencing their IT staff through leading and directing their IT staff a variety of higher learning institutions. In the same vein, (Bass, Avolio, Jung, & Berson, 2003; Rowold, & Rohmann, 2009; Sayeed, & Shanker, 2009) underscored that transformational leaders develop personal and direct connections with their followers with the objective to fulfill both mission and goals of the organization. Further, according to (Aarons; 2006; Bryant, 2003; Currie & Lockett, 2007), transformational leaders develop an environment that nourishes knowledge development, promotes trust, and increased expectations while using charisma to motivate and inspire employees. In essence, by ensuring that followers are a part of the cohesive unit, this leadership trait enhances and develops teamwork.

As noted by Argia and Ismail (2013), transformational leaders are tasked with meeting objectives and inspiring followers to perform beyond their desired expectations and to promote a paradigm shift in their current cognitive abilities. At the same time, the authors posited three categories for effective transformational leadership within organizations:

- Mission oriented - starts by creating the vision for the institution
- Performance oriented - underscores the need for providing followers with required assistance
- Culture oriented - highlights the urgency of detailing organizational norms and enhancing a goal oriented organization (Argia & Ismail, 2003).

Transformational leaders instinctively affect their followers to desire to follow them as a transformational leader and the leader's objective is for their followers to emulate the transformational leader. Concurrently, transformational leaders intellectually stimulate their followers and challenge them to produce meaningful results in their job accomplishments (Lim & Ployhart, 2004). As an example, in an organization where followers observe their leadership showing genuine concern for their development and team cohesiveness, followers will be more willing to adapt this mindset to improve their own efforts and thus, enhance the organization as a whole. Moreover, transformational leadership is focused on the belief that management can affect their subordinates ideas, perspectives, and actions by articulating on the need for collective or teamwork related objectives (Moynihan, Pandey, & Wright, 2012; Twigg, Fuller, & Hester, 2008).

According to Sayeed and Shanker (2009), in their study on emotional intelligence and transformational leadership, posited that the link between the leader and the

subordinate need for the transformational style to be effective is more linked to the emotional degree rather than any other variations of managing individuals. In contrast, Van Aswegen and Engelbrecht (2009), highlighted that the actions and values of a leader creates an environment that is conducive for a moral environment within the organization. Transformational leaders focus on motivating and inspiring their followers to perform at higher than they are accustomed to in attempt to achieve a desired objective. Notwithstanding, in some organizations leaders use a transactional leadership style to meet either personal or organizational objectives.

Transactional Leadership

Transactional leaders negotiate with their followers to bestow rewards for certain goals or objectives being achieved (Bryant, 2003; Burns, 1978; Hartog, Van Muijen, & Koopman, 1997; Liu, Liu, & Zeng, 2011; Moman 2012; Pieterse, Van Knippenberg, Schippers, & Stam, 2010). As an example, leader employing a transactional leadership style could agree to reward their workforce with a day off, if the workforce obtains a passing evaluation on inspections. According to Bryant (2003), transactional leaders display three particular traits: (a) they work with members of their teams to create clear, detailed objectives and ensure individuals receive rewards that were previously agreed upon, (b) they exchange accolades and guarantees of accolades for individual effort, and (c) they are mindful to the current self-interests of employees, if they the employees desires can be fulfilled while concurrently achieving the agreed upon tasks. Moreover, with an agreed upon accolade, transactional leaders underscore and articulate what actions need to occur, and how these actions, and once completed successfully accolades are presented (Weichun et al., 2012).

According to Moman (2012), a transactional leader's primary focus is on short term goals or objectives and only show concern when a problem of challenging situation occurs within their purview. For example, a transactional leader will clearly articulate to their follower on what is expected in completing the objective, and the reward or accolade that will be presented once the objective is met. Additionally, transactional leadership is centered on giving praise of rewards to superb performance while imposing punishment on followers which do not perform as expected (Jamaludin, Rahman, Makhbul, & Idris, 2011). As an example, in a military organization, members who receive laudatory remarks during a uniform inspection could be allowed to depart early from work, while the military personnel that did not receive the same remarks would have to work the normal hours.

In transactional leadership, the idea is whenever a task or objective is not met to the degree of satisfaction expected by the leader; the leader through their action will get directly involved in the task or objective by acting accordingly (Hartog, Van Muijen, & Koopman, 1997). In essence, the leader will get involved if results are not met; transactional leaders do not motivate followers by inspiring them to perform better they are concerned about the task at hand. Moreover, as highlighted by Liu, et al. (2011) transactional leadership is more of the norm than transformational in organizations. For example, in organizations, individuals are paid a predetermined salary; however, if results are not produced as agreed upon, the transaction could be jeopardized.

Situational Leadership

The situational leader concept developed from two documented behaviors task behavior and relationship behavior. According to Gates, Blanchard, and Hersey (1976),

and Irgens (1995), task behavior is the degree a leader participates in direct communications with subordinates to detail how the task is being completed and behavior relationship is the degree in which the leaders participates in back- and-forth communications to provide socio-emotional support. For example, situational leadership can vary based on the particular task, current situation occurring, and the relationship between the leader and subordinate while conducting the task. Further, situational leaders observe their environment, their workers' individual personality traits, and the task at hand when employing the situational approach to leadership (Bass, 2008).

According to Goodson, McGee, and Cashman (1989), Grover and Walker (2003) and Hersey, Angelini, and Carakushansky (1982), there is no one leadership that will be effective in all areas, leadership style must adapt to current situation of the task. Moreover, depending on the current situation and task at hand, may require a variety of leadership styles to be employed to achieve the desired goal or objective. As noted by Grover and Walker, to be effective, a situational leader needs to be clear, concise, and direct with followers so that there no ambiguity in the directions given to complete a task.

Chief Information Officer Leadership

The global and hyper-connected digital environment of today's workforce has placed an enormous amount of responsibility on the CIOs. Research has shown (Al majali, & Dahlin, 2010; Armstrong, Simer, & Spaniol, 2011; Bassellier, Benbasat, & Reich, 2003; Ernest, & Nisavic, 2007; Gilbert, Pick, & Ward, 1999; Glaser, & Kirby, 2009; Li-Hua, & Khalil, 2006; Nicolay, 2002) that CIOs are integral within their organizations, and are responsible for maintaining optimum current IT capabilities and concurrently, being a visionary for future IT initiatives. In the same vein, CIOs must be

prepared to lead and manage global teams and possess the innate ability to maintain a competitive edge for their organizations.

In his research on IT innovation in global organizations, Deevi (2011) underscored that with developing economic landscape involving China and India, will require CIO/CTO to become more skilled in their professions. Further, he argued the responsibility of the CIO has a significant impact within smaller companies; however, in larger organizations, there may be requirements for multiple CIO/CTOs to accomplish the myriad of domestic and global responsibilities. Deevi also reported on the every changing and competitive marketplace and it appears to be a need for CIO/CTOs to embrace not only developing technology, but to network with the other departments within their organizations to ensure they equally embrace the need for technological advancements.

Interestingly, earning a seat at the table (Pawlowski & Robey, 2004) is paramount for the CIO to be taken seriously within their organizations. In their qualitative study on IT professionals in the work environment, the authors interviewed 23 IT professionals in a large manufacturing and distribution company to ascertain their perspective in the workplace. Pawlowski and Robey used semi-structured interviews for the data collection method and participants were selected from referral of those interviewed earlier. To ensure that obtained saturation in their data pool, they included personal from both the corporate and business units within organizations. The data analysis portion of their study consisted of three parts; hand written notes, interview tapes were transcribed, and third, interview transcripts were re-evaluated with additional note added.

Results of the study conducted by Pawlowski and Robey (2004) indicated the role of the IT professional within the organization should be re-evaluated to reflect IT professionals as gate-keepers of the organizational knowledge. Moreover, the authors highlight that their limitations in the study were due to only conducting research on one organization and, thus not have a comprehensive view of more IT organizations. Further, they recommend future research include the study of the role of IT knowledge broker in a variety of contexts pertaining to IT governance and the effect of outsourcing IT services on an organization. This approach will ensure the CIO is not only committed to their jobs, but learning the business side of their organizations. In the same vein, in his research on IT transformation at British Petroleum, Cross, Earl, and Sampler (1997) posited that embracing IT would be integral in global organization and paramount in executing increased productivity.

In their study on IT investments, Dempsey, Dvorak, Holen, Mark, and Meehan (1998) argued IT decisions should be aligned like any other decision in the workplace. In essence, conducting a cost/benefit analysis prior to making an IT investment is paramount for leaders in both the IT and senior management positions. This initiative will not only empower the CIO; it will assure the CIO that they are an integral part of the upper leadership and management teams and thus, be included in the decision making process for funding initiatives.

Through their research on IT investments Dempsey et al highlighted three impact categories for cost benefit analysis: (a) hard impacts, consisting of the cost of new hardware or savings in personnel costs; (b) market share or productivity gains; (c) unquantifiable impacts, pertaining to improved competitive position or positive customer

satisfaction. Notwithstanding, these management decisions pertaining to IT costs are based on the vision of senior leadership, functionality, and the competitive edge of the investment. Similarly, Al majali and Dahlin (2010), in their qualitative study on the IT gap in public firms in Jordan underscored that both the CEO and CIO must be aligned on IT initiatives in order for the organization to remain competitive.

Al majali and Dahlin (2010) employed face-face interviews during their research with leaders in five different public firms to understand why there was a 'gap' in cultural and educational level of usage. Interestingly, in a major of organizations there appears to be a known lack of alignments between the CEO and CIO. Additionally, this lack of alignment possesses an intriguing question regarding organizations remaining competitive, when basic business and strategic plans do not receive the required attention. In essence, the authors highlighted that leadership is the most integral part of effective decision making and managing organizations.

According to Burnes (2006), poor leadership and management decisions appear to be the underlying reason the majority of IT professionals decide to seek other employment opportunities. In his mixed-methodology study Burnes, purported that one cause for IT workers departing is that once there is a change in leadership and management. Burnes surveyed 52 IT and interviewed 20 individuals generation X and non-generation X eras. Interview questions were open-ended and pertained to reasons for leaving their organizations. Results of the study highlighted, that 57 percent of IT workers feel there will be a change in leadership style and a lack of trust with management which prompts them to depart the organization. In essence, senior

management needs to ensure their employees understand that a change in leadership will not result in a change in the vision and strategy of the organization.

Information technology and business units in organizations must align in order for the organization to function as a cohesive unit. This action will provide a seamless and proactive partnership, allowing for both units to provide the optimum IT service, incorporating both the IT and business strategies. Huang and Qing (2007), underscored when both IT and business are in sync, IT systems are performing as expected and both the IT and business executives or involved in the decisions making. Interestingly, it appears in the majority of organizations, the CIO's position is not seen as an integral position within the organization. However, as noted by Huang and Qing, one particular method to ensure the CIO is seen as an integral part of the organization and is involved in the decision making process is to implement a balanced score-card for IT-business integration.

In the same vein, extensive research has been conducted on the working relationships between the CIO and senior leaders in organizations (Day, 2007; Enns, Huff, & Higgins, 2003; Ernest, & Nisavic, 2007; Feeny, Edwards, & Simpson, 1992; Herstatt, Tietze, Nagahira, & Probert, 2007). Employing the case study approach, Day conducted her study within the insurance industry in the United Kingdom and employed theoretical sampling to narrow the study to 15 interviewees. Analysis from Day's (2007) study was achieved through data coding, which included taking the meanings of the text into forms and contexts.

The conceptual framework for the study demonstrated the relationship between situation, occasions, intellect, plans, and attitudes within a social procedure with the

creation and management of IT services. Results of the study revealed that insurance executives where influenced by outside sources which impeded productive dialogues between the CIO and executives within the insurance agencies. In essence, senior leaders within any organization need to have effective communications between the various departments within an organization. For example, if the CIO does not have a seat and a voice at the corporate table he or she may not be included the financial decision making, which could have a negative influence for IT budgetary needs.

According to Ernest and Nisavic (2007), IT strategy and the business strategy must strive to align with one another in an organization to ensure both future visions are discussed and included in the short and long budget discussions. As noted by Ernest and Nisavic, CIOs in today's organization are being tasked to provide actual tangible examples of IT investments within their organizations. In the same vein, CIOs are expected to understand the business aspects and concurrently display cognitive abilities to manage time and resources. Moreover, as noted by Ernest and Nisavic (2007) CIOs are the focal point for re-engineering of IT, by employing all aspects of business components into an efficient and effective model for the organization.

Further, Kohli and Johnson (2011), reported that business strategy is positioned by means of organizational design and limiting access that are proven by the values and vision of the organization. The authors conducted a qualitative case study on Encana oil & gas (USA) to research how a latecomer can benefit for embracing IT within their organization. They used multiple in-depth unstructured interviews and feedback during their two-year research study. The author's primary focus of the study was to highlight the importance of the CEO and CIO working as a team to address the state of IT with the

organization. As noted by Kohli and Johnson, the CIO is integral within the organization due in-part to IT is a part of everything within the organization and the CIO must be involved in all IT improvements, both current and future endeavors.

Research has also shown that (Holtzman, 2008; Huang, Zmud, & Price, 2010; Jablokow, Jablokow, & Seasock, 2010) executives in global organizations, including CIOs understand the importance of growth and innovation within their organization to maintain a competitive edge. Interestingly, as noted by Holtzman, senior leadership must strive to project a consistent strategy for obtaining and maintaining an innovation process that improves the lead time for research and development.

Huang et al. (2010) conducted a qualitative case study on IT governance; in particular, IT steering committees, and IT-related communication policies in three small-medium organizations. The gist of their study focused on IT governance and IT steering committees and their relationships with senior executives and managers throughout the organization. The authors employed interviews as the data collection instrument and selected three organizations headquartered in the mid-west to achieve their sampling strategy. Entry into the three organizations was obtained through approval of the CIOs at each location and all interviewees were queried for approximately one hour, on their comprehension of their organization's business strategies and IT governance structures.

The transcripts for the study conducted by Huang et al. (2010) were coded using a predetermined specification of constructs. Further, data analysis focused on how IT governance initiatives were compared with the accomplishment of using IT and connections changed across the three cases. Findings in the study indicated the degree in which IT governance polices, recommendations, and instructions are allocated among an

institution is paramount. Notwithstanding, the authors list three limitations in the study: (a) they only collected data for three organizations, (b) they limited their selections sites to only Subject matter experts (SMEs), and (c) only a few executives were interviewed in each of the case sites.

The author's implications for their qualitative study included that organizations should hire executive IT steering committees and ensure the results of the committees' decisions are shared with designated members. In essence, IT steering committees are designed to provide guidance and a checks and balances approach as it pertains to IT related initiatives. In the same vein, IT governance pertains to senior leaders being a part of the discussion and decision-making involving IT-related strategies.

Herstatt, Tietze, Nagahira, and Probert (2007) conducted an exploratory study defining the duties and responsibilities of the chief technology officer (CTO) in the Japanese electrical engineering industry. Using the semi-structured they interviewed 25 CTOs to discuss their day-to-day functions within their organizations. Their findings in the study indicated that CTOs in Japanese firms did not have full approval or appointment authority within their business units. Further, the limitations in their study included the relative small numbers of interviewees and the lack of discussion of concerning the qualifications and skills for CTOs.

Interestingly, in the digital and hyper-connected workplace, best practices Jeffery and Leliveld (2004) and project alignment (Jenkin & Chan 2010) are two integral components of organizational success. For example, in today's budget driven decisions, organizations must ensure they are doing more with less and cutting costs at every level within their perspective organizations. According to Jenkin and Chan, in their qualitative

study on information systems (IS) project alignment, strategic alignment is paramount to executing an organization's IS strategy.

Jenkin and Chan's (2010) study underscored the following research question in their study: *What are the key events and processes that lead to IS project alignment*? The authors' study further highlighted the importance of proper and detailed decision making during information exchange and subsequent new business approaches. Moreover, their recommendation for future concluded that each individual organization seek a combination of methods that best suits their organization's particular circumstances.

Educational achievements coupled with leadership skills are an integral in the development of leaders within an organization (Karanja, & Zaveri, 2012; Kephart, & Schumacher, 2005; Klenke, 1997). Karanja and Zaveri conducted a qualitative exploratory study on hiring trends and educational backgrounds of CIOs in the US and IT industry as a whole. Their study spanned 11 years and consisted of 1,299 instances of hiring individuals in the IT leadership role. Key findings from their study indicated the majority of IT possessed a technical undergraduate degree and a business graduate degree. Further, the Karanja posited that 13% and 8% of the IT leaders selected in the study obtained their education from Tier 1 and Tier 2 schools. The researchers suggested that future research such include characteristics as years of experience, salaries, age, as well as the size of the firm where the IT leaders are employed. Additionally, future recommendations underscored the need to compare IT leaders' educational accolades with those of the CEOs, CFOs, and COO within the same organization.

In the same vein, recent studies (Kohli & Johnson, 2011; Laplante, & Bain, 2005; Liu, 2010; Marchand, 2008; Peppard 2010; Platt, 2006; Tallon, & Pinsonneault, 2011)

suggests CIO leadership and technological advances must be juxtaposed in order for CIO to succeed with their organizations. For example, if CIOs are not familiar with current industry standards and IT initiatives, they have the risk of being a late comer into the IT arena and thus, come playing catch-up to other CIOs in their industry. According to Kohli and Johnson, latecomer organizations that have a desire to invest in digitization face a plethora of challenges along with opportunities to excel. As an example, CIOs in latecomer organizations must be willing to expand their knowledge base and accept the new paradigm shift for their organizations to become and remain competitive in the hyper-connected global environment.

In todays' global workplace, IT best practices Laplante and Thomas (2006) and IT infrastructure capabilities Law and Ngai (2007) need to be the main focus of CIOs throughout organizations. As noted by Laplante and Thomas, IT organization must be proactive in responding to challenging environments encountered enable to connect their organization's business units. Law and Ngai posited with going interest on IT infrastructure improvements, there has been significance in placing more value in the CIO within organizations. In the same way, it the responsibility of the CIO to underscore the importance and use of new IT initiatives throughout the organization and concurrently enhance or improve business practices.

According to Liu and Hwang (2003), determined leadership and knowledgeable IT workers will either succeed or fail in ensuring an organization's IT programs are effective. In their qualitative study on challenges to transforming IT within the US government, the authors underscored that the government spends tens of billions of dollars on IT, yet they are still faced with a plethora of challenges pertaining to leadership

and management of IT resources. In general, CIOs are solely responsible for IT governance within their perspective organizations, and this responsibility includes researching and implementing new technology and managing IT resources, including personnel. As noted by (Beachboard, 2005; Liu & Hwang, 2003; Lomparte, 2008; Nfuka, & Rusu, 2011; Pawlowski, & Robey, 2004; Pipe, 2009; Sharma, Stone, & Ekinci, 2009), IT governance is more comprehensive and pertains to structural cohesiveness, improved processes, submitting IT plans, IT improvements, costs analysis, recruiting, and keeping the most talented IT workers in the organization.

Marchand (2008) underlined that CIO responsibilities include three objects: management of IT resources, business change enable for IT use, and a strategic business partner within their organizations. Further, Marchand suggests that CIOs must be a constant advocate for the implementation and usage of IT as an invaluable tool within the organization. As an example, the CIO should strive to become an integral member of the senior leader's management and work as a team member to ensure IT is viewed as an integral business addition vice a separate voice in the organization. This approach will give the CIO equal footing as other business leaders and their opinion will be valued throughout the organization (Marchand, 2008).

Marchand and Barrington (2013) conducted research on the importance of CIOs in corporate social responsibility (CSR) in mobile phone solution employing SMS technology for anti-malarial drug distribution in rural developing Africa. Results of their research highlighted the significant leverage that CIOs could contribute by way of using technology, in essence, to save lives in developing countries. Marchand and Barrington concluded their study by recommending the importance of both CIOs and IT managers

across various sectors working together in the future to address CSR in developing countries and to form public-private partnerships to address these global challenges.

In their qualitative study on technology management in China, Li-Hua, and Khalil (2006) underlined three major factors that affect competitive advantages within organizations: 1) Leadership, 2) motivation and empowerment, and 3) management of technology (MOT). Similarly, Noor (2008), conducted a qualitative case study on information technology in a public university in Malaysia, which focused on IT governance, funding, and structure. Noor's study comprised of 13 academic facilities eight administrative departments and 11 institutes and centers of excellence. Results of the study revealed current IT structure and governance where not well defined and the University lacks a common theme for making comprehensive assessment of an integral IT plan. Further, the study also highlighted that IT decisions were mostly based on a users' desires and architecture designs for IT systems and were left to individual units to make the final decision.

Information technology training and the empowerment of both CIOs and their workers is integral for maintaining a competitive edge. According to Pawlowski, and Robey (2004), leadership and employees are expected to seek and acquire training for their development and improvement of individual technology skills. This approach signifies to senior leadership that both the CIO and their employees are focused on being an integral member of the organization's team and they strive to remain competitive in the IT arena. Notwithstanding, the CIO plays a pivotal role in the vision and focus of an organization's ability to juxtapose IT needs and business acumen. Preston, Leidner, and Chen (2008) underscored that organizations that include the CIO as integral member of

the business unit are more likely to view IT as a value in the organization and thus be inclusive to the success of the organization.

Preston et al. (2008) conducted a quantitative field study of CIO leadership styles from 174 diverse organizations from a variety of industries. Moreover, of 174 CIOs interviewed, 35 (20.1%) were women and 139 (79.9%) were men. The authors used four categories to study CIO leadership styles: IT orchestrators, IT laggards, IT advisors, and IT mechanics. Results of the study indicated that 32% of all CIOs interviewed were classified as an IT orchestrator. This, in essence, signifies that a CIO as an IT orchestrator is effective in strategizing is awarded leverage in the organization and a part of the decision making team.

Preston et al. (2008) recommendations include organizations evaluating a CIOs leadership profile by targeting the attributes of the CIO and integration with organization and the total IT investment within the organization. Interestingly, as previous studies has highlighted, the CIO is the focal point for IT related decision in the organization; however, depending whether the CEO and senior leaders view the CIO as an equal member, will determine the value of the CIO within the organization. The role of the CIO as a visionary and strategic leader within the organization must be underscored by both the CIO and senior leaders to maximize future benefits.

Effective leadership in IT management is crucial if an organization's vision and strategy is to remain competitive in the global and hyper-connected workplace of today. Research has shown (Sebastian, & Korrapati, 2007; Sill, 2009; Smith, 2003; Stephens, 1993; Von, Kaufeld, Chari, & Freeme, 2009; Watts, 2001) that CIO/CTO leadership is the driving force behind IT corporate strategy and research and development for an

organization's competitive edge. Sebastian and Korrapati conducted a mixed-methodology on 300 CIOs working for educational institutions and focused on IT leadership perceptions and employee-centric organizational cultures within the workplace. The results and findings of the study indicated that CIOs must change and adapt to current technology and adjust their leadership style to reflect the culture of the organization. In the same vein, CIOs that resist or refuse to make necessary changes will find it challenging, if not, impossible to achieve the desired results within their organizations.

Moreover, Sill (2009), posited the relationship between goal oriented and successful IT organizations, and senior management team, is the organization's ability to recruit a top-notch leadership and management team. Interestingly, Sill highlighted several lessons that he learned during his 11 years as consulting and recruiting for the Oracle corporation: (A) hire type a - intelligent driven individuals that are eager to prove themselves and are more capable than you are, (b) hire individuals that believe in your vision and strategy for your organization and they demonstrated during the interview process that they have done research about your organization, (c) hire ethical individuals who grasps the meaning of what it takes to be a part of an organization that is built on ethics, (d) check the references of the potential employees' prior employment, this action could yield important details pertaining to work ethic, leadership and management styles, and credentials of the individual, and (e) during the interview process, trust your intuition, be sure to observe the individuals mannerisms, eye-contact, facial expressions as they respond to questions during the interview process. Moreover, an organization's ability to recruit and maintain a focused and impressive leadership cadre will display a

positive and effective strategy and most likely a positive tool for attracting the brightest and best workers.

According to Smith (2003), organizations need effective, knowledgeable, and business savvy CTOs to move their organizations towards future growth. Moreover, Smith argued that the following skills and abilities are displayed by effective CTOs:

- *Technology* - CTOs must be a leader and they must integrate themselves into the business aspect of their organizations.
- *Strategy* - CTOs must fully grasp that they are in corporate world and be an integral part of the strategy and direction as it pertains to IT developments.
- *Business Growth* - CTOs must be keen pertaining to IT and future of IT within the organization. Also, CTOs must be cognizant of the financial aspects of the IT investments made by the organization and attempt to get the best return on investment (ROI).
- *Interpersonal skills* - CTOs, like all other executives must possess the innate ability to communicate at various levels throughout the organization. In their positions, they will interact with a variety of individuals and must be able to communicate at various levels to ensure the organization has the competitive edge.
- *Executive relationships* -Though the CTO position is new a majority of organizations, the CTO must remain proactive in attending executive meetings and events. They must also make every effort to not to be only viewed as an IT person, but as a business executive that leads the IT division.

As an example, companies with CTOs that garner interpersonal skills and productive relationship with their peers and senior management is an integral and invaluable member of the organization. Further, CTOs should not only be focused on IT implementation throughout the organization, but concurrently ensuring they promote and climate that is conducive to creating a culture that is technology friendly (Smith, 2003).

Von, Kaufeld, Chari, and Freeme (2009) conducted a qualitative study on critical success factors for effective leadership. The authors underscored that compared to the 30-35 years ago, where IT leaders only focused on IT concerns, today's IT leaders must be multifaceted, focusing on a variety of concerns to include: IT, business skills, leadership and management skills, organizational and cultural savvy, and fiscal management ability. Moreover, in the digital age of today, IT leaders must also be connected globally and display effective leadership from a global perspective. Further, CIOs in military combatant commands consistently must have a global reach and the ability to lead and manage from a global arena.

Von et al. (2009) also argued, IT leaders must be cognitive of the fact, just being competitive in business is no longer the only barometer for success; having an effective strategy and the ability to adapt with the changing times is crucial. In the same vein, effective leaders must possess a variety of competencies covering IT, business acumen, future vision, and a strategic plan in order to be effective and competitive in the global marketplace.

In agreement with Von et al. (2009), Weiss, and Adams (2011) posited that CIOs must evolve in organizations to become: (a) technologist, (b) change agents, and (c) business experts. This approach will enable the CIO to become well versed in all aspects

of the organization and thus have an input within the vision and global of the CEO and the organization. Weiss and Adams conducted a qualitative descriptive exploratory of aspiring and changing role of technology leadership on 55 IT professionals from a Northeastern alumnae database. The gender make-up of the study consisted of 18 (13.7%) female and 37 (32.7%) male. Results of the qualitative data suggests two themes: (a) a merging of the field from focusing on the technologist position to one of a variety of positions, and (b) advancing the corporate ladder to a senior IT position involves business acumen and management skills.

The conclusions for the study of Weiss and Adams (2011), indicated motivated IT leaders want more business responsibilities in their duties and responsibilities and they embrace the term of technical expertise. Further the limitations in the study suggested the limited sample included only technology managers from CIOs to team mangers, and case studies that included more in-depth observations and interviews and would have provided a clearer insight and observation during the study. Implications in the study underscored that IT professionals and managers garner additional business participation and change agent responsibilities along with their technology roles and responsibilities. CIO/CTO leadership styles may vary between the civilian CIOs and military CIOs; however, both organizations yield to have leaders that inspire and motivate their workforce and produce desired results.

IT professionals Weiss and Anderson (2004), IT alignment Weiss, and Thorogood, (2011), and IT infrastructure Xu, Zhang, and Barkhi, (2010) are the underlying focal point of successful and competitive organizations. According to Weiss and Anderson, CIOs in today's workplace have evolved through four phases: (1) glorified

data processors, (2) technocrats, (3) business executives, and the (4) technocrats and business executives. Further, Weiss and Anderson interviewed eight CIOs, 11 VPs of IT, and 75 IT staff members in seven different fortune 500 companies to gain insight of IT roles and responsibilities.

Interestingly, the results of their study indicated the majority of interviewed personnel saw the IT department from their end users' and customers' perspective. Also, the results revealed that professionals that were interviewed failed to have effective communications with their ends users and end users felt the IT hardware and software purchases were more expensive than they should be. Weiss and Anderson (2003) concluded their study by underlining that CIOs and IT organizations must have a comprehensive understanding of IT, networking, financial, and people skills in order to be an effective leader within the organization.

According to Weiss and Thorogood (2011), proper IT alignment and organizational understanding appears to be challenging in the majority of organizations. In their study on information technology (IT)/ business alignment as strategic weapon, the authors explored two companies that were involved in multiple projects and programs that represent a variety of business and IT initiatives. Weiss and Thorogood used a qualitative research methodology and the participant in the study included CIO, director of operations, managers from various marketing divisions, and key members of technical operation groups. Weiss and Thorogood provided questionnaires to the participants via email and the study took three years to complete.

The authors used to two methods for data collection: (a) selwell data collection to develop narrative timeline and describing the operating designs, (b) crown limited data

collection and was based on eight interviews conducted with CIOs. The interviews were semi-constructed and also employed Nvivo to index and organize the data from the study. There were several implications highlighted in the study: (a) objectives/IT alignments cannot be achieved unless both the CEO and CIO are integral in underscoring the vision of the organization (b) large scale alignments, in most cases are motivated by need and requires business urgency and IT initiatives, (c) IT technology and project leaders must work hand-in-hand with leaders within the organization to plan alignments.

As an example, CIOs and IT leaders in organizations must collaborate and coordinate with other leaders in the organizations to ensure plan strategic IT alignments with other initiatives within the organization. Weiss and Thorogood (2011) identify four limitations in the study: (a) cases and examples of organizations that attempted and were not successful in planning and executing strategic alignments were not identified, (b) findings were based on two cases, (c) two cases identified in the study were not an exact match for comparing IT/business alignments, and (d) analysis did not provide granularly level of metrics for initiating challenging strategic projects.

Moreover, as noted by Van der Hoven, Probert, Phaal, and Goffin (2012), a plethora of organizations employ leaders that have a variety of responsibilities pertaining to IT initiatives; however, it is difficult to ascertain the exact tactical and strategic responsibilities of the IT managers. For example, IT managers should be well versed on the vision and the strategic direction of the organization and strive to ensure their subordinates are focused in the same direction. Interestingly, in today's top organizations, the correlation between the senior executive team and IT leadership is the ability to recruit, hire, and maintain successful leaders and managers (Sill, 2009).

IT infrastructure Xu, Zhang, and Barkhi (2010) and IT investments Yen-Tsai, and Campbell, (2005) are two important aspects of organizational success as it pertains to current and future strategies for IT success within an organization. According to Xu et al, IT infrastructure capabilities consists of both managerial and technical proficiency that integral in providing dependable IT services. In the same vein, Yen-Tsai and Campbell posited, in the hyper-connected and global marketplace, many organizations are making investments in IT without being cognizant of capabilities, purposes, and functions of those investments. Furthermore, in their study on IT investments in large Australian firms, Yen-Tsai and Campbell concluded that two findings were highlighted throughout their study: (a) an unenthusiastic attitude pertaining to IT, and (b) and lack of direction and practicability in decision-making and evaluation theories.

Research has shown that IT plays an integral part in organization change (Agresti, 2006; Al-Tameem, 2004; Broady-Preston, 2010; Brooks, N. G., Riemenschneider, Hardgrave, & O'leary-kelly, 2011; Heracleous, & Barrett, 2001; Kishore, & McLean, 2002; McDonagh, & Coghlan, 2006; Quinn, & Baily, 1994; Trauth, Quesenberry, & Huang, 2009). Agresti (2006) conducted a qualitative study of four CIOs from various industries to ascertain their views on change within their perspective organizations. The four CIOs were from the following organizations: (a) Long & Foster Real Estate, (b) Loyola College, Maryland, (c) John Hopkins University, and (d) Comcast communications. The results of their study indicated that all four CIOs shared the identical challenges of being able to prepare for change and accept in order to remain competitive, they must recruit and hire talented staff and remain current with every changing technology trends in the marketplace.

Notwithstanding, McDonagh, and Coghlan (2006) highlighted that in organizations, both human and organizational change are occasionally disregarded pertaining to IT related changes. As an example, CIOs in the past have lacked business acumen and organizational development as it pertains to being accepted as an integral member of executive leadership (McDonagh & Coghlan, 2006). The realization of organizational change is necessary for growth and maintaining a competitive edge relating to IT initiatives. Moreover, Trauth et al. conducted an interpretive epistemology qualitative study on women in the U.S. workforce and organizational factors. They consisted of face-to-face, open-ended interviews with 92 female practitioners in the IT workforce.

Based on data from Bureau of labor statistics, IT growth will continue to increase from 10.4% in 2006 to 25.2% in 2016. However, though there is an increase in need for skilled IT workers, women are under-represented in the IT arena (Trauth et al., 2009). The authors posited that due to organizational factors, women are more likely to leave the IT workforce primarily because of the unfriendly and hostile working environments. Furthermore, the organizational climate is a rooted in beliefs, values, and assumptions of the organization, which has a direct influence on the employees within the organization.

Trauth et al. (2009), highlighted that future research is needed to determine the factors that influence women to navigate their careers outside of the IT profession. Additionally, research should be conducted to examine the relationships, family status, career goals, organizational influences, and work-life balances of females with the IT fields. Further, implications for their study underscore that lack women in the IT workplace could be addressed by having effective mentoring programs, vigorous

monitoring of workplace behaviors, and work-life initiatives instituted to assist women in a male dominated society (Trauth et al., 2009). In same vein, Clark (as cited by Ghazzawi, 2010), highlighted that women are happier than men in their perspective organizations, partially due to they have lower expectations in the workplace than men. Further, the majority of women with a family are concerned with work-life balance and how their organizations assist them with managing the two.

Moreover, and from an IT perspective, women continue to be undervalued and underrepresented in the male dominated IT field. Joshi and Kuhn (2007), conducted an exploratory qualitative study on gender typing attributes in information technology consulting from an international company based in the U.S. The sample size in the study consisted of 40 employees (60 % male and 40 % female) consisting of entry, mid, and upper-level consultants with varying educational degrees in IT or Management. According to Joshi and Kuhn (2007), IT skills are thought of as gender specific, the necessary attributes to succeed in IT are generally observed as being masculine. As an example, this perception could, in essence, in some instances, fulfill a self-fulfilling mind-set towards being less technically proficient in their IT abilities. The implications in the study underscore the need to examine the prototype of a top performer in IT consulting. Further, the limitations in the study were due to the small sample size and the authors suggested that their study warrants further investigation. The authors argued that future research be conducted on a variety organizations to evaluate the role of gender typing of top performers.

Similarly, Wentling and Thomas (2009), posited that women are only 27 % of IT related positions in the workplace as compared to holding 56 % of white collar positions

in the total U.S. workforce. Their research study revealed that females participating in IT related fields are at an overall low percentage. The authors further argued that women bring a variety experiences and perspectives to the IT innovation process and in the diversity conscious mindset of today, organizations should welcome this new perspective. Moreover, as women progress up the corporate ladder this percentage decreases even more (Wentling & Thomas, 2009).

Interestingly, in the prior research studies (Ghazzawi, 2010; Joshi, & Kuhn, 2007; Trauth et al., 2009; Wentling & Thomas 2009) pertaining to females in an IT related workplace, the underlying theme surfaces that a majority of women feel that they are not given adequate work-life opportunities in their perspective organizations. In essence, leaders in their organizations are not providing an environment that is conducive for females to have to opportunity to excel and concurrently be allowed to attend to their families and not feel guilty within the workplace. As an example, in some IT organizations, some women described a 'good ole boy' culture which hindered them for being selected for further development and career opportunities within the organization (Wentling & Thomas, 2009).

Van der Hoven et al. (2012), conducted a qualitative study on CTO technology leadership. Their study consisted of interviewing 30 CTOs of global manufacturing firms which included a range of varying technology management organizations. The authors selected two research questions for their study:

RQ1. What is the range of activities encompassed by the CTO role?

RQ2. What determines which activities take priority for individual CTOs?

Each interview lasted for two hours and the authors employed a cognitive map to display a visual representation of the CTOs responses.

Results of the study indicated in order for CTOs to remain competitive, they need to become exceptional at a variety of challenging activities within their reach and concurrently perform in both strategically and operationally with their organizations. Moreover, CTOs must be able to quickly adapt to the every changing environment and have the ability to lead not only subordinates in accepting change, but have a greater influence on senior management and their peers within the organization. For example, when faced with competing priorities, CTOS must have the ability to ensure that management's needs are addressed along with the operational needs of the organization. (Van der Hoven et al., 2012).

Zhang and Faerman (2007), conducted a qualitative case study on dynamics of leadership in the development of knowledge sharing in the application of distributed leadership. Their sample consisted semi-constructed interviews, which lasted for an hour and a half for 19 participants across various offices, divisions, and organizations in which they employed both purposive and snowballing sampling approach. As noted by Zhang and Faerman, in today's workplace, a possible exists where multiple individuals could emerge as leaders, as a result of knowledge sharing and abilities. For example, in the global, digital, and hyper-connected workplace of today, organizations need to have leaders and managers in positions that enable them to increase knowledge sharing across departments and organizational thresholds.

However, in the majority of organizations, especially IT organizations, sharing of any information is in itself challenging. Case and point, in order for knowledge sharing

to be effective and produce desired results, leaders must have an agreed upon vision and work collectively to achieve the agreed upon objective. Results of the study by Zhang and Faerman (2007) underscored that in any organization, upper management needs to be integral in all proposed changes that would have an impact on the vision and strategy of the organization. Moreover, to remain competitive, organizations should allow individuals to collectively contribute to enhancing and improving leadership roles at all levels throughout the organization (Zhang & Faerman, 2007).

Cotter (2004) conducted research on computerized physician order entry from a Chief information officer's perspective. As noted by Cotter, in today's electronic environment, IT plays an integral role in enhancing and improving patient care in critical situations. The CIO's primary objective in the health care field is to ascertain their role and focus on providing the tools that will ensure the uninterrupted flow of pertinent information to those individuals in need. In her research, Cotter highlighted that in health care institutions, there must be a plan that aggressively peruses detailed information with the main purpose of delivery to the patient and this approach must be agreed up at all levels within the health care organization (Cotter, 2004).

In conclusion, Cotter (2004) posited the CIO must comprehend the results of employing information technology and attempt to exhaust all measures to provide leverage to individuals throughout the change. Further, the CIO needs to ensure the correct technology is in place and is reliable, secure, adequate, integrated, and available to support to current of future needs of the organization. Subsequently, the CIO must approach the IT concept as a team approach and ensure everyone involved shares a common objective for IT governance (Cotter, 2004).

Beachboard (2005) conducted a mixed-methodology on information technology management challenges at the bureau of land management. The study consisted of surveys being received from 28 B

Bureau of land management (BLM) and 19 managers agreed to be included in follow on interviews. Beachboard employed an active interview approach which enabled the participants to lead the discussion and discuss their thoughts on the bureau's IT management and implementation. Beachboard (2005) used taping for the interviews and transcribed the 900 statements for coding and six themes developed. Results of the study indicated there is not a comprehensive checklist for IT leaders to adhere to and IT management practices needs a look into an institution's history and organizational culture. An implication for the study included the author highlighted a bias in the study as it pertains to the selected research methodology. Moreover, implications for future research included the descriptive model employed by the author can be used as a linch-pin for a plethora of future research studies (Beachboard, 2005).

Research has shown that leading and managing IT in organizations is challenging and every changing endeavor (Keen, 1993; Rhoads, 2008; Strokes, 2004; Subirana, 2004). According to Keen (1993), all organizations have access to similar information technology tools; however, the deciding factor to achieving objectives is management abilities. As an example, leaders should always strive to ensure they juxtapose efficient technology with effective leadership to have a competitive edge in the marketplace. Managing IT will continue be to challenging and leaders will need to be prepared to adjust their leadership styles to coincide with their organizational objectives.

The study conducted by Keen (1993) highlighted the role of senior business managers in IT management and the business imperative required to stay current in IT developments. Keen argued that there is a paradigm shift in organizations attempting to balance both IT management and business savvy, which required IT managers to be an integral part of business decisions within organizations. In the same vein, Rhoads (2008) highlighted that when organizations make a financial support in technology purchases they often have copious options to choose from. For example, in today's budget conscious society, CIOs must not only be knowledgeable in IT, but also understand the intricate details of their organization's corporate financial board meetings.

According to Strokes (2004), CIOs, historically, are alone in their IT initiatives, though they have an abundance technical acumen; they appear to be deficient in organizational and business sense. Interestingly, this observation regarding IT management has been underscored in several prior research studies on CIO leadership. Moreover, Subirana (2004) conducted a study on executive leadership and informational technology technical details. Subirana's study was conducted on two business organizations: 1) Steelscreen, which was a failure in business and 2) RoweCom, which was a success in business. In essence, his study illuminated how an organization's inability to comprehend the importance of IT management technical observations in their daily duties and responsibilities.

According to Subirana (2004), management should be positioned to observe opportunities and diffuse severe failures, regardless, if this initiative requires grasping of IT intricate details in order to remain competitive in the marketplace. As an example, CIOs leaders in global IT organizations must be an integral part of executive leadership

and be involved in the financial decision making as it pertains to IT related funding. Additionally, Subirana highlighted those organizations that are better prepared for the future and prevent IT failures, while concurrently using IT innovations can provide success to their organizations.

In the same vein as Subirana (2004), Goh, Prakash, and Yeo (2007), articulated that soft systems methodology (SSM) is used a management tool for IT leaders to manage process management of IT resources.

Goh et al. (2007), conducted a qualitative case study on an IT unit of a large multi-national firm employing face-to-face interviews for five key personnel. The company EMS Corp. was a prominent electronics organization and was globally distributed in more than 40 countries. The research was conducted on the five individuals using structured open-ended questions during the interview. Further, the data was analyzed using content analysis, which involved data captured during the interviews being classified and placed into categories (Goh et al., 2007). Moreover, the study by Goh et al. (2007) addressed three research questions:

RQ1. Why is a shared service model attractive for organizing IT resources in a multinational manufacturing firm?

RQ2. Why certain IT capabilities are better managed under a shared service model?

RQ3. How can the transition from a traditional mode of organizing IT resources to a shared model be better managed?

In addressing the research questions, the authors highlighted that research conducted yielded the following responses: RQ1- cost and quality of service was

determining factor in using a share service model, RQ2- better management of IT resources, delivery, and performance were determined to be essential under the shared service model, RQ3- participants in the study argued that it was paramount that human and communication were integral in the transition to a successful shared service model (Goh et al.,2007).

Managerial implications for the research included the authors' study being the first known to analyze and evaluate shared services within an IT organization and the study also highlighted the rational for arranging pertinent global IT requirements under a shared model. Further, in conclusion, Goh et al. (2007), study detailed key issues to be considered when navigating to a shared service model and their study was be an added bonus for managers desiring to adopt the concept of shared services model. Additionally, limitations in the study were identified as only interviewing five individuals, and authors focused on a single unit of the EMS Corporation (Goh et al., 2007).

In the same vein as Cotter (2004), the study conducted by Jeffery and Mary (2009), illuminated the growing demand for health care information technology for patient care in the medial arena. Jeffery and Mary (2009) study consisted of 2005 data stored in the Healthcare information management systems society (HIMSS) which contained over 4,000 health organizations in the United States. Incidentally, this data provided a plethora of data on various hardware, software, and IT infrastructure within healthcare organizations.

Results of the study by Jeffery and Mary (2009), underscored that of the 4,000 health organizations, 2,137 responded there were a wide variety of health information technologies currently available to assist with patient care. Also, results revealed that

laboratory information technology can be integral in garnering patient safety by discussing test results and assisting in comprehension of the information. As a case and point, poor IT management has led to a significant increase in financial support to healthcare IT information systems. In fact, results of their study outlined that information technology is being employed at an increasing rate to enhance and improve patient care throughout healthcare industries (Jeffery & Mary, 2009).

Institutions of higher learning must aggressively and continually prepare the youth of today for dynamic and every changing IT environment of today. According to Havelka and Merhout (2009), as increased research is performed, IT initiatives can be aligned to developing needs and build a new academic standard based on current status quo, while concurrently providing a proven set of highlighted constructs that will be infused in the IT academia for the long haul. As an example, if higher learning institutions are proactive in staying current on technology and have research and development teams that are driven, they will be more poised to prepare the young impressionable minds of today's youth.

Havelka and Merhout (2009) conducted a theory information technology competence which consisted of two groups of IT executives. The authors employed a qualitative field study which consisted of two group data gathering meetings using a nominal group procedure. The authors defined the nominal group process as a technique modification developed by prior research and the actual data gathering process took an hour to complete and identified 56 detailed items. The authors used theoretical sampling method and open coding to identify targeted incidents. The authors' study was composed

of four distinctive fields: personal traits, professional skills, business knowledge, and technical knowledge (Havelka & Merhout, 2009).

The conclusion for the qualitative study by Havelka and Merhout (2009), included that the theory for IT professional competence could be employed to underscore and define deviations and do the required academic modifications. Indeed, an academic plan that connects to the proposed theory will more than likely develop more results oriented long-term IT endeavors; which are integral for hiring managers who invest copious amount of resources into molding entry-level personnel (Havelka & Merhout, 2009).

Organizations in the global environment of today are constantly looking ways to improve on the delivery of IT and at the same time attempt to cut costs while improving and enhancing IT services. Notwithstanding, Benamati, and Lederer (2001) conducted a study on how IT organizations handle rapid change within their organizations. The authors used a qualitative field study methodology and used structured interviews with IT professional to ascertain the methods applied to capture challenges of changing IT environment. Further, a random survey was distributed to 1,000 (246 were employed in the study) IT professionals; however, the authors used a pilot study which included five IT professionals to authenticate the survey. The interviews lasted approximately 90 minutes and 93% of the participants had completed a college degree and 38% had advance degrees (Benamati & Lederer, 2001).

With recent and rapid changes to the global IT environment, leaders in IT organizations must be armed with knowledge on the next "big" IT initiative in order to remain competitive in the digitally-connected marketplace of today. As noted by Benamati and Lederer (2001), a fluid environment forces organizations most likely to

respond to the fluid environment or integrate to affect and solidly deviations in a direction that is more rewarding towards the organization. Further, Benamati and Lederer identified five coping parameters to address rapid change in organizations: (a) Education and training, (b) vendor support, (c) endurance, (d) internal procedures, and (e) consultant support.

Benamati and Lederer (2001) identified several implications in their study. First, the research study was only conducted with experienced IT professional and should have included other professions in other fields. Second, the study does not acknowledge the underlying factor for use of coping devices. Additionally, research could have highlight which coping devices were interconnected to particular problems and which ones were most successful. The authors also point out that future research should investigate in detail, the relationship between consultation support and challenges with rapid IT deviations (Benamati & Lederer, 2001).

Similar to Benamati and Lederer (2001), Jia, Reich, and Pearson (2008), conducted a study on IT service quality research. According to Jia et al. (2008), the participation of IT initiatives within a business has increased exponentially in recent times, led by varying expectations from the business and pertaining to technological setting. For example, domestic and global businesses are instantly connected due to improved and enhanced information technology infrastructure of today. As noted by Jia et al., leaders need to internal stop gaps to investigate and determine how changes within their IT organization will enhance service return on investment.

Recent studies have shown (Medcof, 2007; Smith, 2003) that CTOs in organizations must understand and adapt their leadership style to the style of the CEO.

As noted by Medcof (2007), CTOs in some organizations lack the team concept in executive board meetings and this may highlight why their IT objectives are not always supported by leadership. Moreover, Smith (2003) highlighted during the early stages of IT implementation, CIO were classified as "techies" vice business tacticians and were forced to highlight their worth in contributing to corporate strategy. In the same vein, Smith underscored that CTO must ensure they develop important relationships with executives within their organizations to further solidify their place as an integral member of upper management. As an example, if the CTO is not attending or not invited to attend the financial decision meetings, they will not have to opportunity to argue for funding regarding current and future IT support.

Additionally, Medcof (2007) noted that CTOs perform three integral leadership roles within organizations:

1. Functional leadership – promotes good management of R&D and innovation
2. Strategic leadership – makes sure R&D is fused with organizational strategy
3. Supra-functional leadership – has the CTO been proactively participating in creating corporate strategy and implementing a course that aligns with strategic endeavors within the firm

In conclusion, the study conducted by Medcof (2007) illuminated that CTOs and upcoming CTOS should strive to ensure their past performance reflected a positive trend, which will prepare them for accepting more leadership roles at the CTO. As a result, prior research studies underscore functional leadership and underline an accepted detail

of the comprehension and cognitive abilities that a CTO should ascertain in order execute their duties (Medcof, 2007).

According to Sebastian and Korrapati (2007), poor or misguided information technology leadership can result in severe losses due to degraded IT team accomplishments and less than anticipated organization expectations. Case and point, if an IT leader does not possess the ability to transform their IT workforce to produce the expected outcomes he or she has failed in their basic duties at a leader. In the same vein, Sebastian and Korrapati argues, that IT deviation in the juxtaposition of IT objectives and the CIO is illuminating with clarity, and CIO that fails to adhere to recent and rapid changes in today's fast moving digitally connected world, will be challenged to meet organizational objectives (Sebastian & Korrapati, 2007).

Organizations on the global marketplace must not only management their workforce, they must equally have an integral part in data management in order to best optimize their finite resources. Tirgari (2012) conducted a qualitative phenomenological study on 20 IT professionals. The professionals in the study were selected from Texas, West Virginia, and Washington D.C. and consisted of obtaining their views on IT policies and procedures against data that was not properly managed on corporate storage networks. The study consisted of field notes and observations during the interview process that employed 16 questions and focused on data storage and demographic information.

According to Tirgari (2012), supervisors in who have the ability to comprehend the technology, distribute it to their employees, and concurrently enforce policies against unintended use is paramount in moving towards successful IT implementation within

their organizations. In the same manner, Sherer, Kohli, and Baron (2003) highlighted those organizations at pinnacle e-business in today's workplace must invest in current applications while concurrently upgrading existing infrastructure to garner application sharing and a dialogue among organizational members along with business associates. To illustrate, having an open an effective dialogue will ensure a certain level of trust between all parties and allow for all parties to be an integral part of IT implementation within the organization.

Tirgari (2012) employed purposive sampling to target IT professionals consisting of manager, engineers, administrators, and analysts who were at least 18 years of age and were in their current position for two years. The data collection for his study consisted of the interviews be digitally recorded and played back during the analysis to transcribe the information. Further, to validate the information, the author sent copies of their particular interviews to each participates for accuracy, which after reviewing the contents; the participants had to sign a form validating the information (Tirgari, 2012). Actually, limitations in the study included the interview of IT professionals only consisted of constricted geographical locations Texas, Virginia, and Washington D.C. and also the sample size consisted of only 20 IT professionals. Conclusions in the study underscored several themes that were discovered during the data analysis: implementations to manage data, policies, and procedures required to limit unstructured data, new employee briefings, security concerns and lacked data management, and training courses for employees (Tirgari, 2012).

The fast-paced digital, hyper-connected, and global workplace of today's environment forces IT and corporate leaders to be proactive and forward thinkers as it

pertains to IT investments within their organizations. According to Sherer (2007), the majority of organizations do not have defined operating procedures and the vast number of management within organizations does not have a designated IT procurement process. Further, IT investment in any organization is mandated by IT governance that underscores control, authority, accountability designations, and responsibilities. Again, in some organizations IT managers alone lead the effort for IT infrastructure development; however, business professionals as well as IT professionals need to work as a cohesive unit for their organizations to successful completion of IT projects (Sherer, 2007).

CHAPTER 3. METHODOLOGY

Introduction

This chapter begins with the research design and rational for using the phenomenological research methodology. Moreover, this chapter highlighted the sample, population, and sampling strategy and captured the lived experiences of the participants. The deployment and use of interview and open-ended and questions addressed, along with the instruments to be utilized the study. Further, the data collection, analysis, and the examination of validity and ethical standards were highlighted in this chapter.

The purpose of this phenomenological study described transformational, transactional, and situational leadership styles employed by five CIOs at combatant commands located on a U.S. Air Force base. According to Bass (2008), the leader of an organization can change employees' mindset, comprehension, and focus to deal with the assigned task, or conversely, the employees' motivation to cope with the task. Research has shown there have been recent studies on CIO leadership styles (Glaser, & Kirby, 2009; Preston, Leidner, & Chen, 2008; Peppard, Edwards, & Lambert, 2011); however, there have been very few studies conducted on leadership styles of CIOs at military combatant commands. The intent of this study was to fill a gap on leadership studies and add to the body of knowledge for CIO leadership styles at combatant commands during the post 9/11 era.

This qualitative study employs three research questions to address leadership styles of CIOs at military combatant commands:

1. What are the intrinsic motivating factors that influence CIOs to employ transformational leadership style?

2. How do followers respond to extrinsically motivation from transformational leaders vice transactional leaders?

3. What is the effect on task accomplishment in military organizations where CIOs employ situational leadership versus transformational leadership styles?

Research Design

This research study will employ a phenomenological research design to describe the leadership styles of Chief information officers (CIOs) at five combatant commands located at a military base in the U.S. Phenomenology is a philosophy founded by Edmund Husserl during the beginning of the 20th century and coined the term phenomenology based on his new found perspective toward philosophical challenges (Giorgi, 1999). By conducting a phenomenological study, the lived experiences of the participants can be detailed in the data collection and analysis process. According to Giorgi (1997), a phenomenological study enables the researcher to capture the experiences of the participant from the participant's vista; however, the researcher must make all attempts to bracket their own personal feelings during the study. The study consisted of purposive sample use open-ended questions and structured interviews which will be conducted during a 90 day period. The researcher posited that this methodological approach enabled that the true essence of the CIO/CTOs experiences were observed and documented.

The qualitative phenomenological approach was the research method used for the study of leadership styles of CIOs. This approach enabled the researcher to obtain vital information from the participant's perspective by preparing an online survey to determine if the potential candidate meets requirements for the study. Further, once participants

were selected, the researcher employed conversational interviews to obtain data from the participant's perspective. Paton, Martin, McClunie-Trust, and Weir (2004) highlighted the participant has first-hand experience of the phenomenon, and the researcher must display the ability to engage in the participant's phenomenon to document the lived experience. For example, if the participant felt they could trust the researcher and there was mutual respect, the participant would be more willing to describe their lived experience.

Sample

The sample for this qualitative phenomenological study was selected from Chief informational officers (CIOs) at the five military combatant commands located on a U.S. Air Force Base. According to Miles and Huberman (1994), interpretive researchers, primary conduct their study will a sample pool of participants in the context of the research; however, quantitative researchers employ larger numbers to obtain results that can be measured quantitatively. The sample pool for this phenomenological was approximately 10-12 CIO/CTOs at the five military combatant commands. The researcher employed a survey via email to ascertain if the potential participants met the minimum threshold to become selected for the study, once selected the researcher contacted the participant to select the time and place to conduct the interviews. The interview questions were accessed via online survey method (Survey Monkey) and were be password protected.

Setting

The setting for the study was an office or conference of the selected CIO/CTOs at the five combatant commands located on a U.S. Air Force base. As noted by Creswell (2009), in qualitative studies, the researcher should collect data in the natural setting of the participant to capture the essence of the phenomena. As an example, by conducting the study in an area or place that is familiar with the participant enabled the researcher to put the participant at ease.

Instruments/Measures

The instruments for the study were created by the researcher and the researcher solicited input from a panel of three experts which reviewed and validated the questions prior to the questions being implemented in the study. As highlighted by Qu, and Dumay (2011), conducting interviews with participants in a qualitative study allows for both the researcher and the subject to experience each other's' world. In the same vein, an effective interview could yield data that is relevant to the topic and underscore the lived experiences of the participant.

Based on past experiences in IT organizations, the researcher created the following open-ended questions for interviews and surveys during the study:

1. Describe the most demanding aspect of your daily work environment?

2. How would you describe the leadership style (transformational, transactional, or situational) employed by leaders within your organization?

3. Describe what leadership style you would consider most effective when urgent operational military requirements take precedence over routine daily requirements?

4. How you describe the working relationship between military, civilian, and

contractors within the workplace?

5. Describe how global decisions are made regarding the allocating of communications assets, when dual requirements are identified in support of missions.

6. Describe whether a leader's intrinsic or extrinsic motivating style is more effective in task accomplishment?

7. How do you compare the effectiveness tasks accomplishments when situational

versus transformational leadership styles are displayed in the workplace?

8. Describe the command climate during and after a military mission has concluded?

The interview questions were field tested by military IT experts with more than 15 years in the field. Moreover, the results of the field testing enabled the researcher to modify or re-write the questions which ensured the questions captured the true essence of the participant's experience. Further, as noted by (Sandy & Dumay, 2011), qualitative researchers assume if questions are phased correctly, they will illuminate all data pertaining to the subject being researched.

Data Collection

This study employed a phenomenological approach to data collection. The researcher used a questionnaire for the basis of determining if participants met the criteria for the qualitative study. The researcher has 29 ½ years in the military working in information technology, including leading and managing a diverse and global workforce. However, the researcher had no prior experience in disturbing an online survey or conducting a face-to-face interview for qualitative phenomenological research study.

The role of the researcher in conducting researcher was a new experience and required additional skills. The researcher obtained these needed skills by reviewing prior phenomenological studies conducted within the last five years. This included reviewing literature on how to write, submit an online survey, conduct a one-on-one interview, and how to ask open-ended questions for participants in the study.

This phenomenological research design was appropriate for this study due to the nature and the desire to capture the participants lived experience as a CIO at a military combatant command. Incidentally, there was very little literature on studies conducted on the leadership styles of CIOs at combatant military commands. Thus, a study of this nature added to the body of knowledge and highlighted CIOs within military combatant commands.

According to Donald (2008), the CIOs primary concern within their organization is being an integral leader in the organization as it pertains to the business of allocating information technology (IT) resources. This rationale for using the phenomenological research design described the leadership styles of CIOs and provide a roadmap for future studies pertaining to CIOs at combatant military commands. The researcher initially used internet provided questionnaire to capture responses from the participants to determine if responses qualified the selected to be considered in the study. Once responses were provided and individuals are selected, the researcher conducted one-on-one interviews with open-ended questions. The following information was requested from each participant during the initial internet survey questionnaire:

1. Do you have any prior military experience?
   a. Yes
   b. No

2. How many years did you serve?
   a. less than 4
   b. 4 - 6
   c. 7 – 10
   d. Retired
   e. Currently active duty

3. What is your gender?
   a. Male
   b. Female

4. What is the highest educational level that you have achieved?
   a. High School
   b. Associates' Degree
   c. Bachelor's Degree
   d. Master's Degree
   e. Ph.D.

6. What is your longevity in your current position?
   a. 1 year or less
   b. 2 years
   c. 3 - 5 years
   d. 6 - 10 years
   e. 11- 20 years

This qualitative phenomenological study consisted of purposive sampling. Therefore, tailoring the sample to CIOs at military combatant commands consisted of the following procedures:

1. Obtained permission from senior leaders at the 5 military commands to conduct researcher at their commands.

2. Identified CIOs at commands and obtained permission to conduct qualitative research involving the CIOs.

3. Based on information received pertaining to CIOs; determined the particular and level of detailing was presented in the study: an open-ended, face-to-face interview, an internet survey, or phone interview.

4. Insured written consent forms were read and signed by participants in the study.

According to Creswell (2009), the theory highlighted in qualitative research is to purposefully choose individuals of locations that will assist the researcher comprehend the challenge and the research inquiry.

The researcher begin initial interviews based the results of the online survey that was completed by the selected participants.

1. Once information was reviewed, researcher contacted participants to schedule a meeting to conduct a face-to-face prior to the interview process

2. The research made appropriate reservations for interview rooms and ensured there is a do not disturb sign at the entrance during the process

3. Since all of the CIOs at military work in top secret environments, audio recording devices were not allowed in the workspaces; therefore, the researcher conducted the interview in a conference room at each location

4. To protect in privacy of the participants, the researcher used pseudonyms

5. Interviews were 25-30 minutes for each participant and due to the varying locations of the military commands; interviews were conducted during a weekly timeframe.

Data Analysis

The researcher prepared data for analysis by ensuring all collected data was accounted properly. Open-ended questions: were reviewed, validated, and transcribed for further coding using NVivo software. According to John, and Johnson, (2000), individuals employing computers for to assist in their qualitative research should comprehend and ponder concerns and implications of using computers for data analysis. Surveys and phone interviews: were reviewed for accuracy and member checking was employed to ensure the participant's experience was annotated and prepared for coding by NVivo.

Elo and Kyngäs (2008) describes data analysis as a process which captures open coding, designing categories, and a general description of the research topic being explored. For this qualitative phenomenological study, the researcher attempted to ensure the analysis of the data follows detailed steps throughout process. Further as noted by Coleman and Charlotte (2007), the researcher was the integral tool in the analysis and interpretation of the data. As an example, the researcher ensured the data obtained from the participants was the most accurate and captured the phenomena as described.

The researcher reviewed the signed consent forms for the participants prior to starting the interview process. In addition, the researcher annotated accurate field notes (since no recording devices are allowed in secure military spaces), and ensured information was recorded exactly as the participants describe the phenomena. Further, at the end of each session, member checking was completed and allowed the participants to validate the recorded data. In data analysis, the selection of the subject is the primary

concern and the objective of the researcher is to interview individuals that can provide information that is germane to phenomenon under study (Coleman & Charlotte, 2007). Lastly, all data was transcribed for further analysis and held in secure storage area for protect data integrity. According to According to Hiller (2010), anonymity should be at the forefront when presenting questions to ensure that an individual's personal information which could be used to identify the subjects in the study.

Credibility, Reliability, and Trustworthiness

The researcher established credibility by ensuring the participants' account of their lived experiences. According to Cutcliffe, McKenna, and Cutclife (1999), "researchers are encouraged to return to the participants and attempt to gain verification" (p.6). Transferability pertains to the ability of the researcher's to transfer to other studies and the same results. According to Fossey, Harvey, McDermott, and Davidson (2002), the principles of good repetition in the execution of interpretive research and the reliability of the interpretation of information collected are both vital to conclusions about its quality. The researcher ensured dependability and confirmability in the study by employing member-checking to ensure information recorded was validated by the participants. Further, the researcher ensured biases were highlighted prior to the study and attempts were made to bracket the researcher's experiences during the course of the study.

According to Creswell (2007), researchers must ensure that by employing the auditing process, confirmability and dependability is achieved during the qualitative study. For example, if possible, have an external source review and advise the researcher their results of the audit. This procedure assisted the researcher in ensuring that the

information obtained was accurate and captured the participant's experience. Moreover, as noted by Adcock and Collier (2001) measuring validity in qualitative research should be understood that in comparison to situations that develop in navigating between theories and observations. As noted by (Sandy & Dumay, 2011), qualitative researchers assume if questions are phased correctly, they will illuminate all data pertaining to the subject being researched.

Ethical Considerations

The main ethical issue for this study was to ensure all participants were fully briefed on the study and the researcher had permission from each participant to conduct the interview. Equally important, the researcher ensured participants understand that they were assured that confidentiality and anonymity was adhered to while collecting, analyzing, and storing the data. Notwithstanding, the researcher became thoroughly familiar with policies and procedures outlined in (45 CFR 46) and APA ethical principles. Further, Heilferty (2011) posited that the idea of participation of informed consent as an integral part of ethical treatment of humans as research subjects has been argued in various articles.

According to Walker (2007), "adherence to ethical standards is arguably heightened when researching the lived experience" (p.8). For example, if the researcher did not adhere to the set ethical standards, the participants' personal information and trust during the study could have been lost and cause future harm to the participants. Further, signed informed consent documents were in place to protect the participants at all times from harm and the participants had the option to stop the interviews at any given time without fear of reprisals. Additionally, Philip, Rogerson, and Francis (2010) argued,

ethics are paramount in an attempt to ensure the credibility of the researcher, their team, and organization the researcher represents while conducting the study. Moreover, unlike quantitative studies where the researcher does not have direct contact with the participant, in qualitative studies, the researcher is directly involved phenomena and must capture the participants' lived experience as it is detailed in the study (Ponterotto, 2010).

CHAPTER 4. RESULTS

Introduction

This research study highlighted leadership styles of Chief information officers (CIOs) at military combatant commands. Primarily focusing on military CIOs at combatant commands, the objective of this study was to underscore transformational, transactional, and situational leadership styles. Displaying the results, this study detailed the purpose, how it was organized, and how it aligned with the overall dissertation.

In addition, to assist the reader in navigating and comprehending the results, a cursory background of the study was underscored to capture how the study compared to identified leadership styles, and how the researcher dialogued with organizations at combatant commands to ascertain the required data. Moreover, the researcher illuminated the basis on why to conduct this study, background, experiences, or training that shaped the particular design in the study, the role of the researcher, and any underlining integral inputs the researcher may have had on the results of the research study.

Concurrently, to provide the reader with a concise roadmap of the results of the study, a detailed description and the sample and research methodology was offered. A presentation of the data and analysis followed and research questions were highlighted during the data analysis process of the study. In summary, the researcher recapitulated the main points of the chapter and anticipated the reader's eagerness to review the interpretation of the data presented in chapter five.

The researcher, a 29 ½ career Navy Officer, has traveled to more than 49 countries and has spent entire military career working in information technology from a

global perspective. Interestingly, in the digital connected and fast-paced global workplace, effective leader is paramount. Moreover, a CIO's leadership is integral in ensuring their organization remains competitive in today's environment. Notwithstanding, the researcher's interest in conducting a study on leadership styles at military combatant commands was due to very little historical research has been conducted on CIO leadership styles at combatant commands and this study will be seminal study on the topic.

In addition, since September 11, 2001, the focus of the military has been fighting the Global war on terror (GWOT) and leadership has been an integral component in the successful execution of providing efficient and effective information technology to accomplish both the mission and meet objectives. The researcher has vast experience in the CIOs directorate working with military or governmental organizations that were challenged due to not maximizing efforts and poor leadership styles. Conversely, being a career military person, the researcher had objective views towards participants in the study.

The researcher has no prior experience conducting a qualitative research study; however, the researcher has reviewed a plethora of qualitative phenomenological research studies and NVivo 10 qualitative software to prepare for the research study. In addition, the researcher has participated in large scale military operations, where leadership pertaining to the employment of information technology was paramount in the determining the success or failure of the mission. Moreover, the researcher, by employing the phenomenological methodological approach enabled the researcher to experience first-hand the leadership practices of CIOs at combatant commands.

Description of the Sample

The sample for the study consisted of a cadre of either active duty or retired military personnel working in leadership positions within the Chief information officer (CIO) or Chief technology officer (CTO) governmental organization. In addition, the sample pool of participants all are familiar with working for leaders whom have displayed dissimilar leadership and management styles. Interestingly, the interview comprised of four military combatant commands and included 15 military members or government civilians in either senior leadership or mid-level leadership positions. Moreover, the military members' active service extended from three years to 30 years, and their educational background ranged from High School diplomas to Masters degrees.

As a matter of fact, the majority of the civilians were prior retired military and held leadership positions throughout their careers. Furthermore, the sample pool included one female that served on active duty in the military and is currently a government civilian employee. In the same vein, the following demographics questions were asked to the sample pool of participants:

1. Do you have any prior military experience?
2. How many years did you serve?
3. What is your gender?
4. What is the highest educational level that you have achieved?
6. What is your longevity in your current position?

Most importantly, to ensure anonymity among the participants, a coding system was implemented during the interview process. In essence, this coding system along with open-ended questions provided in the study intent was to capture the participants

experience without identifying which of the 15 individuals made the comments underscored in the study. Table 1 provided insight to how participants were coded to protect their identity during the study.

Table 1

Combatant command and Leadership position	Code
Senior leaders (4)	SL 1-4
Mid-level leaders (11)	MLL 5- 15

The research study was initially designed for five combatant commands; however, during my initial request to obtain a letter of consent from the CIO, the command was heavy involved in real world military operations; therefore, one of the combatant commands was excluded from the research study. Furthermore, the researcher's intent was to conduct one-on-one, face-to-face interviews with each participant selected for the study; however, due military operational OPTEMPO at one of the combatant commands, two interviews were conducted via the phone and the interview questions submitted back to the researcher as a word document. As highlighted in table 1, the majority of the leadership within the organizations were in the mid-level positions and four in the senior leadership positions. Moreover, the below tables underscored the demographics in the study.

Table 2

Demographics prior military experience

Military experience	Number of participants
	n=15
SL 1-4	yes
MLL 5-15	yes

Table 2 highlighted that all of the participants had prior military experience while they worked within their CIO organizations. Which, in essence, exposed them to a plethora of leadership styles throughout their lived experiences within the workplace. In addition, table 3 underscored the educational level of each participant in the study and illuminated that leaders in military organizations did not required advance degrees to an integral part of the leadership team.

Table 3

Demographics level of education

Education level	Number of participants
	n=15
High school diploma	3
Associate's	0

Bachelor's	1
Master's	11

Table 4

Demographics military service

Years served	Number of participants
	n=15
Less than 4	0
4-6	1
7-10	3
Currently on active duty	6
Retired military	5

Table 4 highlighted the diverse number of years served for each participant and shows that the average participant in the study is approximately eight years of military service. In the same vein, table 4 points out that the 6-10 years is the average time served in a leadership position within the organization. Further, table shows that the average time for the participants in a leadership position is 3-5 years; however, the survey

revealed that four individuals have been in a leadership more than years within their organization.

Table 5

Demographics years in leadership current position

Current position	Number of participants n=15
1 years or less	0
2 years	5
3 – 5 years	6
6 – 10 years	2
11 – 20 years	2

Research Methodology Applied to Data Analysis

The study of leadership styles of CIO at combatant commands led to a phenomenological research approach where analysis is conducted with words and can be dissected into practicable sectors to compare, contrast, and analyze patterns (Miles & Huberman, 1994). A qualitative phenomenological methodology was the optimum research method to capture the essence of the participants' experiences. According to Swanson and Holton (2005), during the data analysis stage, the researcher will navigate into generalizing and theorizing the data collected to search for themes that emerged during the process. This study focused on leadership styles, in particular

transformational, transactional, and situational leadership styles of CIOs at military combatant commands.

This study will used the Giorgi's model of phenomenological analysis for the study of CIO leadership styles at combatant military commands. According to Giorgi (1997), a phenomenological study enables the researcher to capture the experiences of the participant from the participant's vista; however, the researcher must make all attempts to bracket their own personal feelings during the study. As a matter of fact, in applying Giorgi's model to the study, the researcher was able to capture entire lived experiences of the participants by employing open-ended questions and direct observations.

The research study was conducted on a military base at four high OPTEMPO combatant commands that supported global missions. The initial study began by either sending an email, meeting in person, or making to phone call to each of the CIOs to inquire whether they were willing to participate in the research study. The intent of the study was to interview personnel working within the five CIOs at the combatant command; however, only four CIOs signed the consent letter allowing the researcher to conduct the study. Once the four consent letters were signed by the CIOs at the combatant commands, the researcher coordinated with each CIO to solicit individuals to be considered for the study.

After coordinating with potential participants, the researcher emailed information pertaining to the study, including a consent form and a direct link to Survey Monkey to complete the initial survey to conduct the study. Based on the results of the surveys, the researcher selected 15 participants to be included in the qualitative phenomenological study pertaining to leadership styles of CIOs at combatant commands. In the same vein,

the researcher used purposeful sampling, open-end surveys, face-to-face, and phone interviews to target individuals in the CIO directorate. However, to due to the nature of phenomenological study, obtaining permission to interview the selected participants was challenging and several abortive attempts were made for participants in two of the four combatant commands to agree to place and time to conduct the interviews. In addition, due frequent military unanticipated meetings and travel arrangements, two of the 15 interviews with the participants had to be conducted via phone and emails back and forth.

Presentation of Data and Results of the Analysis

Prior to presenting the data and the results of the study, the researcher underscored the purpose of the study which ensured the reader has an understanding of data and analysis found within the study. The purpose of this study was to describe transformational, transactional, and situational leadership styles employed by five CIOs at combatant commanders located at a military base in the U.S. According to Bucic, Robinson, and Ramburuth (2010), the particular leadership style displayed by the team leader affects cohesion, perception, and performance of the team.

Phenomenological study

This phenomenological research study garnered on transformational, transactional, and situational leadership styles of military combatant commanders. The eight interview questions in the study were designed to assist in answering the research questions:

RQ 1: What are the intrinsic motivating factors that influence CIOs to employ transformational leadership style?

RQ 2: How do followers respond to extrinsically motivation from transformational leaders vice transactional leaders?

RQ 3: What is the effect on task accomplishment in military organizations where CIOs employ situational leadership versus transformational leadership styles?

Interestingly, the findings in the study highlighted that leadership styles of CIOs in military combatant commands was diverse and CIOs within the four military commands was described by juxtaposing the research and interview questions. Moreover, eight interview questions were presented to the participants to capture their experiences with transformational, transactional, and situational leadership styles within their perspective organization, which resulted in 12 pages of hand written transcribed field notes. The eight interview questions underscored in the study were:

1. Describe the most demanding aspect of your daily work environment?

2. How would you describe the leadership style (transformational, transactional, or situational) employed by leaders within your organization?

3. Describe what leadership style you would consider most effective when urgent operational military requirements take precedence over routine daily requirements?

4. How you describe the working relationship between military, civilian, and contractors within the workplace?

5. Describe how global decisions are made regarding the allocating of communications assets, when dual requirements are identified in support of missions.

6. Describe whether a leader's intrinsic or extrinsic motivating style is more effective in task accomplishment?

7. How do you compare the effectiveness tasks accomplishments when situational versus transformational leadership styles are displayed in the workplace?

8. Describe the command climate during and after a military mission has concluded?

Table 6

Research and interview question relationship

Research questions	Interview questions
1. What are the intrinsic motivating factors that influence CIOs to employ transformational leadership style?	1. Describe the most demanding aspect of your daily work environment?
2. How do followers respond to extrinsically motivation from transformational leaders vice transactional leaders?	2. How would you describe the leadership style (transformational, transactional, or situational) employed by leaders within your organization?
3. What is the effect on task accomplishment in military organizations where CIOs employ situational leadership versus transformational leadership styles?	3. Describe what leadership style you would consider most effective when urgent operational military requirements take precedence over routine daily requirements?
	4. How you describe the working relationship between military, civilian, and contractors within the workplace?
	5. Describe how global decisions are made regarding the allocating of communications assets, when dual

	requirements are identified in support of missions?
	6. Describe whether a leader's intrinsic or extrinsic motivating style is more effective in task accomplishment?
	7. How do you compare the effectiveness tasks accomplishments when situational versus transformational leadership styles are displayed in the workplace?
	8. Describe the command climate during and after a military mission has concluded?

Table 6 displayed the relationship between the research questions originated in the study and interview questions provided to the participants to more effectively illuminate the findings in the study.

Findings

Research question 1. Inquired, "what are the intrinsic motivating factors that influence CIOs to employ transformational leadership style?" This question sets the foundation for the describing factors that motivate and transform workers with CIO organizations.

Interview question 1. Inquired, "describe the most demanding of your daily work environment? This question was answered by all 15 participants with the majority stating that managing both local and global expectations in a combatant command is the most demanding aspect of their daily working environment.

Research question 2. Inquired, "how do followers respond to extrinsically

motivation from transformational leaders vice transactional leaders?"

This question prompts participants to compare which type leaders transformational or transactional are more effective within the workplace.

Interview question 6. Inquired, **"**describe whether a leaders' intrinsic or extrinsic motivating style is more effective in task accomplishment?" All 15 participants felt strongly about this question and the majority described intrinsic motivation as a paramount trait within their perspective organizations. Based on the analysis of Nvivo 10 the below table highlights key words and the weights average for the response to interview questions 1 and 6.

Table 7

Key words used by participants in interview questions 1 and 6 and research question 1 and 2

Words	Count	Weighted Percentage (%)	Similar words
Managing	144	.57	control, achieve
Expectations	45	.32	anticipate, believe,
Intrinsic	39	1.03	inherent, internal
Extrinsic	23	.61	N/A

Note. Weighted percentage is frequency of the relative to total words counted (*Nivo 10).*

Verbiage for interview questions 1 that align with research question 1, "describe the most demanding of your daily work environment?" and research question 6, "describe whether a leader's intrinsic or extrinsic motivating style is more effective in task accomplishment?" that were captured in the study include:

Interview question 1 was asked to each participant with varying responses. A mid-level leader with several years of military experience, was initially reluctant to open up to the interview with concern that his responses would get back his organization. However, the researcher assured him that the conversation would not be shared with his organization and the names of the participants would be kept private. He then relaxed somewhat and stated, "higher headquarters daily requirements and managing expectations is the majority of his challenges on a daily basis." He also highlighted, "at times the pace is slow, but it all depends on whether or not a military exercise is about to begin". Interestingly, this direct answering to the research questions was evident with all of the participants in the study and this is primary due to having prior military experience and being informed to practice operational security (OPSEC) at all times.

The initial plan was to conduct the all interviews in person with the participants, however; due ongoing operational military missions, a two of the participants had to respond via email or phone. Moreover, when interview question 1 was posed to a senior level leader, he responded with, "managing subordinates, attending high level meeting, and staying synchronized with senior (4 Star) military leaders at two separate headquarters and coordinating daily expectations are the most challenging part of his daily work environment." Based on the participants' response and the follow-up phone call, it appeared the he was pressed for time and did not want to elaborate on his response. In the same, another participant underscored, "managing competing priorities, and deciding the most important task to attack first" was the most "challenging and at times… frustrating" aspect of his daily routine. In each of the combatant commands, it

appeared that the majority of the leaders, both senior and mid-level accept the challenges of the task at hand and deal with them accordingly.

Additionally, another senior leader forcefully stated, "managing global assets, personnel, and tactical requirements, along with managing several thousand personnel in global combat zones, is the most challenging part of his daily work environment." Further, this leader wanted to ensure he pointed out that his particular organization support a wide variety of military operations and his team was second to none at being prepared to the war-fighter's needs. Notwithstanding, another senior participant argued, "the most demanding aspect is tracking ongoing issues – it's a very dynamic environment highly dependent on personalities and the ability to stay "in the loop."

Prior to asking for responses to interview question 6, the researcher gave the participants the definitions of intrinsic and extrinsic motivation. With that said, all the participants were adamant that only intrinsically motivated individuals are accepted and work at their perspective military commands. As noted by a mid-level leader, "intrinsically motivated people want to be here!" Moreover, a senior-level leader responded to the interview question, by highlighting that his particular combatant command is for self-motivated individuals and stated, "intrinsic motivation required within the directorate to get things done." Again, and along the same line as the other leaders, a mid-level leader insisted, "intrinsic motivation, as long as there is an understanding of the expectations to the task," is the required motivation style that is accepted within his organization. In the same vein, another mid-level leader pointed out, that though both motivation styles are practiced within his organization, "intrinsic motivation is more effective in the workplace."

The responses to the above interview questions provided a detailed insight to the priorities that both senior and mid-level leaders placed on managing expectations and the intrinsic motivation desired in the workplace. Actually, participants in all four commands placed a high value on ensuring mission objectives within their perspective organization were met and being a self-starter was paramount within their organizations.

Interview question 2. Inquired, "how would you describe the leadership style (transformational, transactional, or situational) employed by leaders within your organization?" The majority of the participants, described transformational leadership as the leadership style most employed in the workplace. However, as noted below, a few participants described both transactional and situational as the leadership style used in the workplace.

Based on the analysis of Nvivo 10 the below table highlights key words and the weights average for the response to interview question two.

Table 8

Key words used by participants in interview question 2.

Words	Count	Weighted Percentage (%)	Similar words
Transformational	103	2.49	change, converted
Situational	137	2.26	challenge, context
Transactional	52	1.10	business, deal

Note. Weighted percentage is frequency of the relative to total words counted (Nivo 10).

Verbiage for interview question 2 that align with research question 2, "how would you describe the leadership style (transformational, transactional, or situational)

employed by leaders within your organization?" The definitions and an example of each leadership style was explained to each participant to ensure there was not any ambiguity caused by the interview question.

This particular question seemed to garner enthusiastic responses from each of the participants in the study. A senior leader responded, "majority of individuals within the organization are transformational leaders…in this organization it is a must that transformational leadership is used" he seemed focused that this was the only style that was expected within his organization. He also stated, "we need leaders at all levels to be able to work and perform as team unit and understand the mission at hand." However, a mid-level leader felt that transformational leadership was the preferred within his military organization and stated, "transformational leadership style; however, prior to my arrival, transactional leadership was used within the workplace." He further insisted, "by having transformational leaders and followers within our organization, the tasks at hand are more likely to be accomplish on time." Based on his demeanor and look of satisfaction, there was a definite transformation within his organization since his arrival and situational leadership was a style he was particular impressed with employing.

In the same manner, another mid-level leader felt that all three leadership styles were practiced within his organization and suggested, transformational leadership is employed 25% of the time, transactional 50% of the time, and situational 25% of the time". Along the same lines as the mid-level leader, a senior leader stated, "all three leadership styles are common within their command." Transformational leadership styles is one of the core themes in the study as noted by a senior participant as he underscored, "mix of all three leadership styles; situational 60%, transformational 30%, transactional

10% within the organization," while a mid-level leader posited, that at their organization, "situational leadership is employed 80 % of the time, while transformational leadership is employed 20% of the time."

Moreover, several leaders were quick to respond that transformational was employed throughout their organizations, as one leader highlighted "the leader of our organization is transformational, empowering, trusting," while another participant stated, "transformational leadership is used within my organization." Again, a senior leader underscored, "transformational leadership is the most used leadership trait…people are here because they want to be here" in the same vein, a mid-level leader pointed out, "we use transformational leadership 80% of the time and transactional leadership 20% of the time", he also stressed that he personally felt that "transformational leadership should be used throughout the command but…"it is what it is." Further, one mid-level leader who appeared to be agitated at times and eager to conclude the interview stated, "situational leadership is the most used leadership style within our organization…at my command everything revolves around the current situation."

The responses to interview question 2 underscored that all three leadership styles were employed throughout the various combatant commands; however, transformational leadership was more prevalent as a desired leadership style. However, in the same vein, two mid-level leaders described situational leadership as the most practiced leadership style within their organizations.

Research question 3. Inquired, "what is the effect on task accomplishment in military organizations where CIOs employ situational leadership

versus transformational leadership styles?" This question solicited responses from the participants to whether situational or transformational leadership style is more effective in accomplishing tasks within their particular organizations?

Interview question 7. Inquired, "how do you compare the effectiveness tasks accomplishments when situational versus transformational leadership styles are displayed in the workplace?" This question aligns with the research question and prompts the participants to compare only situational and transformational effectiveness pertaining to tasks accomplishments. Based on the analysis of Nvivo 10 the below table highlights key words and the weights average for the response to interview question three.

Table 9

Key words used by participants in interview question 7.

Words	Count	Weighted Percentage (%)	Similar words
Transformational	92	2.43	function, transform
Situational	73	1.93	criticality, state

Note. Weighted percentage is frequency of the relative to total words counted (Nivo 10).

Verbiage for interview question 7 that align with research question 3, "what is the effect on task accomplishment in military organizations where CIOs employ situational leadership versus transformational leadership styles?" that were captured in the study include:

This interview question presented to each of the participants cause the participants to pause and reflect on their particular organizations prior to answering this interview question. Further, due recent budget cuts and the nature of each combatant command, each of the participants were cognizant that they would have accomplish more tasks with

less resources. Interestingly, based on the intensity and competing priorities, one mid-level leader said, "transformational leadership styles for completing accomplishments; however, internal communications are a challenge within the directorate," this particular participant appeared to be preoccupied with the lack of effective communications within his organization, but when probed on effective communications as pertaining to leadership, did not want to go into further details regarding his organization. However, a senior leader did not hesitate to stress, "transformational leadership is employed 95% of the time, but in task accomplishment; situational leadership is employed 5% of the time within the directorate." Also, a mid-level leader articulated, "situational leadership calls for the leader to adapt to the situation; transformational leaders change the environment, so that an organization may function better," though the question was not directly answered, the response provided an insight to the participants' opinion towards their particular organization and the preferred leadership style.

Interestingly, transactional leadership style was not a trait that was employed to a large degree in any of combatant commands, and for the most part this leadership trait in frowned upon in military organizations. However, regarding situational leadership, a senior leader stated, "situational leadership is constantly used within the directorate." In responding to the interview question 7, two mid-level leaders posited, "transformational leadership is more effective within the organization" and "transformational leaders, by definition, motivate their followers to have personal desire to produce results…they are more likely to achieve higher task accomplishments than situational leaders."

The responses to interview question 7 highlighted the lived experiences of the participants' view pertaining to comparing situational versus transformational leadership

styles. Interestingly, though transformational has a higher weighted average with the context of the study; a large majority of participants described situational leadership a styles that was routinely used within their organization. Further, all the combatant commands sighted, transformational leadership style is preferred; however, at a times, situational leadership is needed, due to the nature of a combatant command and the need for constant readiness.

Interview question 3. Inquired, "describe what leadership style you would consider most effective when urgent operational military requirements take precedence over routine daily requirements?" The responses to this questions were interesting, and the participants' choice of most effective leadership styles varied with some interesting comments. All 4 of the military combatant commands have global responsibilities and conduct 24/7 operations, whether that planning for an actual mission or a training scenario, effective leadership is paramount. As noted by a senior leader, "situational leadership is most effective due high level military requirements and the having the flexibility to accomplish the next important task quickly and effectively." However, in contrast, another senior leader highlighted, "transformation leadership, due to the nature of this command…and most leader at this command employ transformational leadership to accomplish tasks." Moreover, one senior and one mid-level leader underscored respectfully, "transformational leaders is the best leadership at my organization" while the mid-level leader stated, "transformational is the most effective leadership style within my organization."

Themes

The primary emerging theme exposed is the study was transformational leadership. Additionally, results of the interviews revealed that transformational leadership was the leadership styles that deemed most important to the participants. Moreover, from the participants' lived experiences, they all described in great detail, that transformational leadership was the expected and desired leadership style within their organizations. Further, the participants expressed that leaders that were self-starters and had the ability to transform others to excel beyond their expectations were integral to the success completing mission objectives. In the same vein, the participants highlighted that the majority of military individuals interviewed and accepted at combatant commands would not be recruited or recommended, if they had not displayed transformational leadership in their prior military evaluations. Research has shown that transformational leaders shape and provide intellectual stimulation for their workforce (Bryant, 2003; Colbert, Kristof-Brown, Bradley, & Barrick, 2008; Goertz, 2010; Weichun, Sosik, Riggio, & Baiyin 2012). Interestingly, throughout the interview process, the participants consistently described transformational leadership as the trait they felt they exhibited; however, in some circumstances, their leaders displayed a more situational leadership style.

The secondary emerging theme discovered in the study as evident by the participants' lived experiences was situational leadership. Though transformational leadership was the expected and preferred style, situational leadership was employed to a large degree throughout the commands. In essence, both senior and mid-level leaders described situational leadership as being employed a vast amount of time within their

perspective organizations and having to rely on this leadership style due to unplanned global urgencies that occurred continually. In some instances, situational was the most effective leadership style because the object was to take care of the current situation now, and discuss it later. Moreover, when global urgent crisis or missions accomplishment waivered on instant decision making, situational leadership was the style of choice by a majority of the participants. According to (Goodson, McGee, & Cashman, 1989; Grover, & Walker, 2003; Hersey, Angelini, & Carakushansky, 1982), there is no one leadership that will be effective in all areas, leadership style must adapt to current situation of the task. Furthermore, in lieu of transformational and situational, transactional leadership was rarely seen as a trait that was used or desired within the majority of the combatant commands.

Summary

This summary of chapter four provided a review of the three research questions discussed within the study. In essence, the researcher provided eight survey questions to garner the demographics of the participants along with eight interview questions to capture their lived experiences. The objective of this chapter was to discuss and analyze transformational, transactional, and situational leadership employed by CIOs at a military combatant command. Interestingly, the researcher brings 29 ½ years of military experience into the research study, in addition to working within various CIO organizations.

The study consisted of four combatant commands comprised of 15 participants assigned the CIO directorate. As highlighted in the study, transformational leadership was the most prevalent leadership styles desired by both senior leaders and mid-level

leaders; however, situational leadership was employed concurrently throughout some of the organizations. In the same vein, there were two emerging themes; transformational and situational leadership, which proved insight to the preferred and most used leadership style within combatant commands. Most importantly, the three research questions were aligned with the interview to highlight key words and phrases used by the participants to capture the leadership styles employed most widely used in the perspective military combatant command organizations.

CHAPTER 5. DISCUSSION, IMPLICATIONS, RECOMMENDATIONS

The purpose of the chapter is to evaluate, discuss, analyze, and make recommendations relevant to the findings of this research study. The study employed eight survey questions and used survey monkey as the vehicle for prospective participants to log in to complete the survey. In addition, the study comprised of eight interview questions to capture the lived experiences of the participants located at five military combatant commands. The primary purpose of this phenomenological study was to describe transformational, transactional, and situational leadership styles employed by five CIOs at combatant commands. Further, this study filled a gap on research conducted on leadership styles of combatant commanders, while adding to growing body of knowledge on CIO leadership studies.

According to Creswell (2007), a common rule in interpretive research is not just to observe limited locations or people but concurrently gather plethora data pertaining to each location or person. Moreover, there is no known study to date, that highlights CIO leadership styles at military combatant commands; therefore, this was a seminal study on the leadership styles. However, there has been a multitude of leadership studies regarding CIO leadership in the corporate world (Deevi, 2011; Gilbert, Pick, & Ward, 1999; Grover, Karahanna, & El Sawy, 2011; Harris, 2011) but to the nature of military commands, leadership styles takes on a different meaning.

The preceding chapters in this study familiarized the audience with a research study titled, Leadership styles: A phenomenological study of transformational, transactional, and situational leadership styles employed by CIOs at military combatant commands. In fact, an exhaustive literature review was conducted within chapter two

highlighting prior studies on CIO leadership styles. According to Marchand (2008), CIO responsibilities include three objects: management of IT resources, business change enable for IT use, and a strategic business partner within their organizations. Moreover, recent studies (Kohli & Johnson, 2011; Laplante, & Bain, 2005; Liu, 2010; Marchand, 2008; Peppard 2010; Platt, 2006; Tallon, & Pinsonneault, 2011) suggests CIO leadership and technological advances must be juxtaposed in order for CIO to succeed with their organizations. Notwithstanding, CIOs and CTOs must be cognizant of senior leaders within their organizations, and must strive to become an invaluable and integral member in the decision making process.

Chapter three of the research study employed a qualitative phenomenological methodology that captured the participants lived experiences As noted by Creswell (2009), the objective underscored in interpretive research is to acquire information about the challenge or concern from the subjects and to focus on the research to ascertain the participants' perspective of the phenomena under study. In addition, chapter four illuminated the results and findings based on the surveys, interviews and themes discovered in the research process. This chapter provided a summary of chapter four, discuss of the results, analysis of the data uncovered and provided an insight to the significance of the research.

Further, implications presented in the study's findings were underscored as compared to the theoretical construct. Moreover, limitations were addressed concerning any potential bias that may have developed due the researcher's position as an active duty military officer and being able to emphasize with the participants lived experience. In the

same vein, recommendations for future research were discussed pertaining to CIO leadership styles at military combatant commands.

Summary of the Results

This study provided an insight, analysis, and attempted to fill a gap pertaining to leadership studies on transformational, transactional, and situational leadership styles of CIOs at military combatant commands. The problem under investigation for this study was to describe which leadership style has been most effective for CIOs at combatant military commands military during the post 9/11 era. This study was significant due to this was a seminal study on leadership styles at a combatant command and I was given permission to interview four CIOs and their personnel to described transformational, transactional, and situational leadership styles within their commands. Further, this study provided a platform for future leadership studies at military combatant commands and highlighted the leaders and their choices of leadership styles during and after military operations.

The literature reviewed during this study consisted of a plethora of research underscoring leadership styles practiced by CIOs/CTOs in private industry. For instance, CIO/CTOs must have the ability to not only influence their subordinates; they must be influential among their peers and senior management in order to succeed in meeting their objectives (Deevi, 2011; Enns, Huff, & Higgins, 2003; Karanja & Zaveri, 2012). In essence, these leaders must not only have an excellent grasp of their information technology arena; they must be aligned with the COO/CFO and other senior leaders to execute the mission, while adhering to the mission of the organization. According to Strokes (2004), CIOs, historically, are alone in their IT initiatives, though they have an

abundance technical acumen; they appear to be deficient in organizational and business sense. Interestingly, though CIOs have made drastic improvements over the last decade, they are still challenged to be an integral part of the decision making process within organizations.

The qualitative phenomenological research method was used for this study to capture the lived experiences of the participants. According to Giorgi (1998), phenomenology is a philosophy founded by Edmund Husserl during the beginning of the 20th century and coined the term phenomenology based on his new found perspective toward philosophical challenges. To obtain a concise and detailed experience from the participants, interviews were conducted with each participant, employing open-ended questions, followed by member checking which, ensured precise information was captured.

The findings revealed that transformational leadership was the leadership style that was preferred and expected by all of the 15 participants. However, in some of the combatant commands, situational leadership took center stage, though it was not the preferred leadership style, it was the style that was employed by both senior and mid-level leaders throughout the organization. Further, participants also highlighted that the majority of individuals working in a combatant command was intrinsically motivated and individuals at combatant commands were all self-starters and driven to succeed in mission accomplishment.

Discussion of the Results

The objective of this study was to describe transformational, transactional, and situational leadership styles employed by leaders at military combatant commands. In

the same manner, to address the three leadership styles, three research question were posited to further address leadership at combatant commands. The research questions were:

(a) what are the intrinsic motivating factors that influence CIOs to employ transformational leadership style?; (b) how do followers respond to extrinsically motivation from transformational leaders vice transactional leaders?; (c) what is the effect on task accomplishment in military organizations where CIOs employ situational leadership versus transformational leadership styles?

Concurrently, to address the research questions, eight open-ended interview questions were designed for the CIO organization at the four combatant commands to capture the participants' perspective on leadership styles within their commands. The eight questions included:

1. Describe the most demanding aspect of your daily work environment?
2. How would you describe the leadership style (transformational, transactional, or situational) employed by leaders within your organization?
3. Describe what leadership style you would consider most effective when urgent operational military requirements take precedence over routine daily requirements?
4. How you describe the working relationship between military, civilian, and contractors within the workplace?
5. Describe how global decisions are made regarding the allocating of communications assets, when dual requirements are identified in support of missions.

6. Describe whether a leader's intrinsic or extrinsic motivating style is more effective in task accomplishment?
7. How do you compare the effectiveness tasks accomplishments when situational versus transformational leadership styles are displayed in the workplace?
8. Describe the command climate during and after a military mission has concluded?

The primary emerging theme discover in the study was transformational leadership, which the researcher used Nvivo-10 qualitative software to find relative word count used by the participants to describe their experiences during the interview process. Moreover, in preparation for the interview process, the researcher was cognizant that the interview process would take place in a secure (highly classified) area where recording devices were allowed. Therefore, the researcher ensured copious hand written notes were taken and read back to the participants for clarity and member checking. The second theme that emerged from the study was the effective use of situational leadership, which the researcher used Nvivo-10 qualitative software to find relative word count used by the participants to describe their lived experiences during the interview process.

Interestingly, transformational leadership style was described by all 15 participants as the most effective leadership style as a desired trait; however, this leadership trait was not always relied upon to accomplish tasks or lead subordinates with the organizations. On the other hand, at combatant commands, leaders and their style of leadership is a direct correlation to mission accomplishment and mission success.

As described by the four senior leaders interviewed in the study, they felt their subordinates must be intrinsically motivated and be a transformational leader to be an effective member of the team. For example, a senior leader inserted, "majority of individuals within the organization are transformational leaders and in this organization… it is a must that transformational leadership is used." In addition, as noted by another senior, "transformational leadership is the most used leadership trait and people are here because they want to be here." Interestingly, both of these arguments by the two senior leaders illuminated that, from their vantage point, there is only one type of leadership style that is practiced and expected within their organizations. However, and in the same vein, mid-level leaders did not share that same perspective on leadership styles. As noted by a mid-level leader, "situational leadership is the most used leadership style within our organization," this observation further highlights the varying perspectives observed by the researcher during the interviewing process on leadership styles at combatant commands.

Incidentally, when participants responded to interview 7, "how do you compare the effectiveness tasks accomplishments when situational versus transformational leadership styles are displayed in the workplace?" the responses were equally diverse. Interestingly, a senior leader noted, "situational leadership is constantly used within the directorate," while a mid-level leader argued, "transformational leadership is more effective within the organization," and based on the response from both participants performed and expected leadership styles in the effectiveness of tasks accomplishments is subjective. According to Burns (1978), leaders do not destroy subordinates' desires however, they may inspire particular purposes and discard others.

Situational leadership style within a combatant command was a prevalent leadership trait described by the participants throughout each of the four commands. A mid-level leader stressed, "situational 80%, transformational 20% are used within our command," in the same vein, another leader underscored, "mix of all three leadership styles; situational 60%, transformational 30%, transactional 10% within the organization." Bass (1978) posited, supporters' comforts are elevated by transformational leaders from anxieties for sanctuary to accomplishment. In fact, regarding situational leadership, Bass added, situational dynamics govern who will materialize as a leader. Therefore, both transformational and situational leadership styles were described as being effective by the participants in their military combatant commands.

In responding to research question 1, "what are the intrinsic motivating factors that influence CIOs to employ transformational leadership style?" the participants provided interesting responses. One leader noted, "intrinsically motivated people want to be here!" Concurrently, a mid-level leader highlighted, "intrinsic motivation is more effective in the workplace." During the interview process the researcher found that the vast majority of leaders both senior and mid-level leaders did not place much weight on extrinsically motivated individuals as being an integral part of the leadership team at their particular command. This approach could due to the nature and expectations for all individuals working in commands that strived on transformational leader and intrinsically motivation to be the driving force behind mission success and accomplishment.

There were several limitations discovered in the study only doing military combatant commands, along with only a CIO organization. Additionally, a design flaw

in the study could have been conducting a phenomenological study vice case study or other design in the qualitative study. Moreover, other challenges experienced in the study was senior military officers constantly changing the agreed upon place and time to conduct the interviews. In the same vein, the researcher had to conduct a phone interviews with two of the combatant commands, vice in person and captured the participants' experience via word document vice one-on-one interviews, due to military operational missions. Notwithstanding, the information garnered from the interviews were sufficient and detailed; however, conducting face-to-face interviews were desired.

Implications of the Study

The highlighted implications in the study included that leadership styles within the CIO directorate of military combatant commands varies depending on the mission, objective, and the vision of the organization. Transformational, transactional, and situational leadership styles described in the study and employed at the combatant commands was integral in uncovering the motivating factors for leaders. Though this study intent was to fill a gap with leadership studies at military combatant commands, by review prior literature (Greenwood & McNamara, 1969; Bucic, Robinson, & Ramburuth, 2010) on leadership styles, it was evident that the particular style of the leader affects the entire organization.

Equally important, by employing the phenomenological research design, the researcher was able to not only capture the experiences for the participants' but understand how the participants' views on leadership style was wide-ranging, depending on the mission or objective. Interestingly, this phenomenological study used a qualitative software NVivo-10 to analyze the data harvested from the research. As described earlier,

the use of the software enabled key words and phrases to be easily identified, coded, and evaluated to capture the participants' perspective. According to (Derue, 2011; Korkmaz, 2007) leadership traits effect motivation and inspiration of individuals within organizations.

In the global and results driven workplace of today, coupled with constant reductions in the workforce, organizations are forced to do more with less and effective leadership is integral in the success of an organization. The vast literature reviewed in the study indicated the importance placed on CIO leadership styles. For instance, in order for the CIOs to be effective within their organizations, they must strive to align IT and business strategy between the two departments (Ernest & Nisavic, 2007). On the other hand, research suggests that CIOs, historically, have had challenges articulating IT budgetary requirements succinctly to the senior executives in order to garner funding for IT initiatives.

Limitations

There were several limitations identified in conclusion of the study that had an impact on the results. First, the researcher had no experience with conducting a qualitative phenomenological research study. Second, the research study occurred on a military base with only four combatant commands and 15 personnel selected to participant in the study. Moreover, this study was a seminal study; therefore, no prior research studies were conducted to use as a barometer for this phenomenological study. In addition, the researcher had no experience with the qualitative software Nvivo-10 and exhausted a copious amount of time understanding the capabilities of the software. Third, only identifying three leadership styles: transformational, transactional, and

situational limited the researcher, when there are several other leadership styles that could have been discussed in the confines of the research.

Further, because the researcher is an active duty military officer stationed on the same base as the study, and works in a CIO (not used in the study) directorate, there may be a preconceived notions regarding the accuracy of the study. Also, the researcher had to rely on phone and email submissions for two individuals at one of the combatant commands, which did not allow for a face-to-face interview during the data gathering process. Additionally, there were only three research questions and based on the eight interview questions and the participants' responses there should have been at least five research questions created for the study. In the same vein, there was only one female in the study (though the researcher sent invites to two other females) and the results did not reflect leadership styles for a more diverse female perspective.

Recommendations for Future Research

Based on the results of the study on CIO leadership styles at military combatant commands, the researcher recommends a study to be conducted at non-combatant commands vice combatant commands. Along those same lines, this study only highlighted transformational, transactional, and situational leadership styles; however, an additional qualitative study using another research design, and focus on another leadership style not used in this study. Moreover, a study should be conducted and concentrate on one command only vice the five commands that were initially selected for the study.

An additional recommendation for future researchers, is to conduct a quantitative study at same commands but narrow the focus of the leadership analysis to

transformational and situational leadership styles only. In the same vein, the researcher recommends that the data gathering be conducted online only and expand the sampling pool to 15 participants with each command. The last recommendation is for a study to be conducted with each particular military services' CIO (Army, Navy, Air Force, and Marines) to compare and contrast the difference in leadership styles within each organization.

Conclusion

The objective of this dissertation was to make an unbiased attempt to answer the three research questions pertaining to leadership styles of CIOs at military combatant commands. The findings revealed that from the participants' perspective, effective leadership and teamwork was the cornerstone of meeting mission objectives throughout military combatant commands. Participants' observations highlighted how their individual organizations viewed leadership and culture at combatant commands. Moreover, the participants' multiple responses provided a descriptive insight to the daily lives and leadership philosophies within military combatant commands.

The leadership styles described by the participants varied depending on current, future, or unforeseen mission objectives. For instance, a vast number of the participants described transformational leadership as integral and the preferred leadership style within their organizations, while others gravitated towards situational leadership as being the more effective leadership style that led to mission accomplishment. Further, the participants underscored that though their organizations were global in scope and they accepted their global responsibilities, managing daily expectations was the most challenging aspect of their organizational duties. In the same vein, findings discovered

that employing military, civilian, or contractor personnel whom were self-starters and transformational leaders was paramount to mission success. However, in contrast, other leaders within the combatant commands found that situational leadership was the most effective and desired leadership style for mission success.

The findings also suggest that within the military combatant commands, the dedication, tenacity, and can-do spirit is evident regardless of the leadership style that is displayed by the leaders. In the same manner, participant interpretations advocate that good leadership is paramount is a highly desired trait at each of the military combatant commands. Moreover, in today's fiscally constrained government and each organization charged with completing more tasks with less tangible resources, selecting the right people, with the right leadership styles, within an organization yields desired dividends.

The findings in the study indicated that leaders and their particular leadership style varied from military command to command and from one participants' point of view to another. However, having a clear and concise understanding of the mission, objectives, and leadership is essential in any organization government or civilian. Further, leadership is infectious and organizations should strive to institute policies, and procedures, which instill effective leadership, teamwork, and mission accomplishment as core values within their organizations.

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