

LEADER BEHAVIOR IN SUCCESSFULLY COMPLETING AN ERP IMPLEMENTATION
AT AN ARMY INSTALLATION

by

Roy T. Ray Jr.

Doctoral Study Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Business Administration

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Abstract

Enterprise Resource Planning (ERP) has emerged as one of the breakthrough information technologies that can reshape business practices. The Army ERP systems are the central component of the Army's business mission process. However, these ERP systems have yet to provide Army-wide, enterprise-level integration and resource visibility, which is needed to increase efficiency and effectiveness of Army operations and justify the cost of future ERP investment. Few companies complete their ERP implementation on time and within budget, and the incidences of underperformance and failure are incredibly high. Current research notes that the primary determinant of a successful ERP implementation is leadership. Therefore, this study examined the critical behaviors exhibited by leaders to successfully complete an ERP implementation at an Army installation in the Mid-Atlantic region. The study utilized a qualitative case study design to examine the leader behaviors of the military and civilian leaders in an Army organization that implemented GCSS-Army to an Army installation. The study consisted of open-ended interviews with organizational leaders, observations, and document reviews to collect data. The researcher found that leaders lead through their behaviors and this is instrumental in a successful ERP implementation: (a) leaders must establish management commitment and change management, (b) the leaders' behavior changes through the various phases of the ERP implementation, and (c) leaders must continue to seek experience and education. The researcher revealed the implications for these findings, made recommendations for action and offered recommendations for further research. This study closes the gap in defense business practices associated with the implementation of an Army ERP and will serve to prepare better our military and civilian leaders for the challenges with implementing future Army ERP systems.

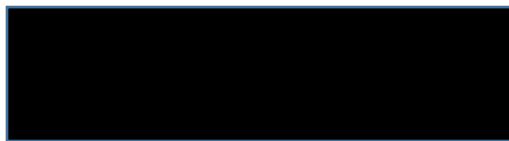
Key Words: ERP, leadership, GCSS-Army, ERP implementation, behavior

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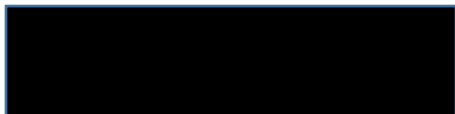
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Date: 04 JUN 2019

Dedication

This study is dedicated to my father, Roy T. Ray Sr. Although he passed away nearly nine years ago, his influence on my life still guides me today.

Acknowledgments

First, I want to thank God for his sustaining grace through this season. He has developed me both mentally and spiritually. I want to thank my wife, Melissa, for walking through this journey with me. I must thank my mother, Victoria, for her prayers and encouragement. I want to thank my brother, Charles, for his assistance and support. I also want to thank my children, Thornton, Andrew, and Rachel, for their support and inspiration. Additionally, I would like to give my appreciation to the leaders at the Army Logistics University for their encouragement and support. Finally, I would like to thank the members of my Applied Doctoral Research Project Committee: Dr. Adam Sullivan, Dr. Gene Sullivan, and Dr. Edward Moore, for their guidance and support.

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Section 1: Foundation of the Study

The Army is continually overcoming numerous complexities that jeopardize its ability to rapidly resource combat operations and preserve its tactical and technical advantage. Enterprise Resource Planning (ERP) has emerged as one of the breakthrough information technologies that can reshape business practices. The ERP system is the central component of the Army's business mission process. However, the Army ERPs have yet to provide Army-wide, enterprise-level integration and resource visibility, which is needed to increase efficiency and effectiveness of Army operations and justify the cost of future ERP investment. Hwang and Min (2015) found that successful ERP implementation hinges on internal factors such as management support, organizational change, open communications, and business process re-engineering.

This section provides essential information about the problem to be examined and the purpose to be accomplished. The approach to research is identified, key terms and assumptions in the study are defined, and the significance of the study is discussed. Finally, a comprehensive review of associated professional and academic literature is presented. This literature review examines the different perspectives found in previous research and addresses their relationship to this study.

Background of the Problem

Schniederjans and Yadav (2013) highlighted that the benefits of an ERP implementation are transferring information faster, reducing logistics costs, reducing inventory, improving supply chain relationships, and increasing customer service. Similarly, Shao, Feng, and Hu (2016) posited that an enterprise system such as ERP is one of the most significant technologies for organizations to manage their supply chain efficiently. The success of an organization is dependent on how well the leaders in the company can lead change in the business. Overstreet,

Hanna, Byrd, Cegielski, and Hazen (2013) noted that the leadership style of the corporate leaders is one of the most important factors concerning an organization's ability to innovate and adapt to change. According to Overstreet et al. (2013), leadership style has both a direct and immediate relationship with organizational success. Therefore, leaders in the information economy need to proactively prepare for the changes that ERP technology brings to structure, jobs, and power in organizations. According to Nagendra (2000), success in groups is more dependent on active leadership than on adopting the latest technology and noted that successful teams must invest in leadership development, and not just in technology.

Stanciu and Tinca (2013) defined the failure of an ERP implementation as a project that has been canceled or did not meet its budget, delivery, and business objectives. Stanciu and Tinca (2013) noted that an ERP implementation cost between 1-3 percent of yearly turnover and lasts between one to three years. However, Stanciu and Tinca (2013) examined the ERP implementation in an international airline service company and determined it was unsuccessful because the company's cost exceeded seven percent yearly, was not completed after five years, and only partially accomplished its business objective. Stanciu and Tinca (2013) highlighted that the company's leadership did not provide proper support during the implementation, the leadership style resulted in resistance to change, and the leadership had no clear strategy for managing change.

U.S. Government Accountability Office (2015) noted that the Department of the Army is responsible for managing over \$17.7 billion in repair parts inventory. The Army uses an enterprise resource planning (ERP) system that supports its repair parts management and supply chain operations around the world which necessitated the implementation of an ERP system throughout all levels of its command structure. For the Army, an ERP system could expedite the

processing of business information such as resource availability and recommend actions based on detected trends to inform important Army readiness decisions. Currently, the Army has four ERP systems: General Funds Enterprise Business Systems (GFEBS), Logistics Modernization Program (LMP), Global Combat Support System-Army (GCSS-A), and Army Enterprise System Integration Program (AESIP). These Army ERP systems use different software versions, host each ERP in different locations and duplicate standard functions in each ERP system. These factors limit the Army's ability to quickly and cost-effectively implement an ERP.

These limitations on the Army's ability to quickly and cost-effectively implement an ERP indicate a gap between the existing literature and effective business practice. Garg and Garg (2014) posited that leadership should define the business plan and vision for the ERP project and align the ERP investment and change management with the strategic alignment of the organization. Similarly, Schniederjans and Yadav (2013) noted that leadership involvement and commitment are critical to a successful ERP implementation.

The Army completed the initial rollout of its ERP implementation seven years ago. However, the Army expects to extend its enterprise resource planning solution by implementing additional capabilities in the management of its supply chains to specific army organizations. It is essential Army leaders possess the particular leadership skills for completing an ERP implementation.

Problem Statement

The general problem to be addressed is that few companies complete their ERP implementation on time and within budget, and the incidences of underperformance and failure are incredibly high. Li, Liu, Belitski, Ghobadian, and O'regan (2016) noted that only 35 percent of companies in the United States completed their ERP implementation on time and within

budget and the occurrences of underperformance and failure are as high as 90 percent. Similarly, Subramanian and Peslak (2010) highlighted that over half of the ERP implementations fail and that 75 percent of ERP implementations are unsuccessful. Likewise, Garg and Garg (2014) noted that 90 percent of ERP system implementations are behind schedule or over budget and the success rate is approximately 33 percent. The low ERP success rates are a compelling reason for investigating the factors which may influence a successful ERP implementation in an organization.

The specific problem to be addressed is the inability of leaders at army installations in the Mid-Atlantic region to complete an ERP implementation successfully. According to Li et al. (2016), the primary determinant of a successful ERP implementation is leadership. Similarly, Subramanian and Peslak (2010) noted that strong and committed leadership is an essential precursor for a successful ERP implementation. Therefore, the focus of this study is to identify the critical behaviors exhibited by leaders to successfully complete an ERP implementation at an army installation in the Mid-Atlantic region.

Purpose Statement

The purpose of this qualitative case study was to increase the empirical knowledge by expanding on the understanding behind the unsuccessful ERP implementation at Army installations. The researcher explored this significant problem through an in-depth study of leadership behaviors and their relationship with ERP implementations at army installations in the Mid-Atlantic region. The intention of this study was to better equip military and civilian leaders in addressing the problem of unsuccessful ERP implementations by identifying specific leader behaviors that were instrumental to success.

To accomplish the purpose of this study, the researcher reviewed the associated professional and scholarly literature to gain a current understanding of leader behavior in a successful ERP implementation. Additionally, the researcher examined ten leaders that have completed an ERP implementation at an army installation. This examination included personal interviews and the review of relevant documents. Stake (2010) highlighted that interviewing and examining artifacts to include documents are the most common methods of qualitative research.

Nature of the Study

The nature of the study guided the selection of the research method and the research design used in this study. According to Creswell and Creswell (2018), the three types of research methods are quantitative, qualitative, and mixed methods.

Discussion of the method. The researcher selected the qualitative research method for this study of leadership behaviors and their relationship with ERP implementation at Army installations in the Mid-Atlantic region. The investigator chose this technique because the research needed a detailed understanding of the issue. Creswell and Poth (2018) noted that this detail could only be established by talking directly with people in their workplace and allowing them to tell their experience unfettered by what the researcher may find in the literature. Similarly, Stake (2010) highlighted that the qualitative method relies on human understanding and perception. Creswell and Poth (2018) emphasized that qualitative research explores issues through the use of open-ended questions in direct interactions, observation through passive communications, and from documents generated from existing artifacts. Therefore, the qualitative method was the best choice for this study.

Creswell and Creswell (2018) highlighted that quantitative methods include complex experiments with many variables for developing knowledge such as for cause and effect thinking

and the testing of theories. It employs experiments and surveys and collects data on instruments that yield statistical information. This study was not collecting data on instruments that produce statistical information; therefore, the quantitative method was not appropriate for this study.

Finally, Yin (2014) indicated that mixed methods combine the quantitative and qualitative approach and the collection of both quantitative and qualitative data. Mixed methods are based on knowledge claims that are consequence-oriented and problem centered. Since this study does not incorporate a quantitative component, the mixed method design was not appropriate for this study.

Discussion of the design. According to Creswell and Poth (2018), the five approaches of qualitative research are narrative research, phenomenological research, grounded theory research, ethnographic research, and case study research. The most appropriate design for this study was the case study approach. Creswell and Poth (2018) viewed case study research as a research methodology and defined it as the study of a case within a real-life, contemporary context or setting. Similarly, Yin (2014) noted that case study research investigates a present-day phenomenon in its real-world context, mainly when the boundaries between the background and the event are not evident. Accordingly, Creswell and Poth (2018) noted that the case might be an individual, a small group, an organization, or a partnership. However, the case may also be a community, a relationship, a decision process or a particular project. Yin (2014) showed that case study research is an all-encompassing research method because it covers the logic of design, data collection, and approaches to data analysis. Yin (2014) noted that three conditions determine the selection of the case study design: the type of research question presented (how or why?), the need for the researcher to control the behavioral events of the participants (yes or no), and focus on contemporary happenings as opposed to historical events. This study presented a

research question regarding how leadership behaviors affect the successful implementation of ERP, it did not seek to control the action of the study participants, and it was focused on contemporary issues. Therefore, the case study approach was an appropriate qualitative method for this study.

According to Creswell and Poth (2018), narrative design is a qualitative research approach that is both a product and a method. It is a study of stories or a description of a series of events that accounts for human experiences. In narrative research, researchers collect stories from individuals about their experiences. These stories may result from a story told to a researcher or a story that is co-created between the researcher and the participant. Creswell and Poth (2018) noted that it is best to use the narrative design for a research question when you are focusing on one or two individuals and telling the stories and experiences of their life. The narrative model is an efficient method for showing the participant's entire life history. Since this approach is telling the participant's life history, this approach was not the most appropriate for this study.

Creswell and Poth (2018) noted that in a phenomenological design, the researcher describes the ordinary meaning of the lived experiences of several individuals and focuses on unfolding what all participants have in common as they experience the phenomenon. Therefore, phenomenology does not begin with a theory, but it starts with an event. The purpose of this design is to reduce the experiences to a central meaning or the "essence" of the experience. Creswell and Poth (2018) highlighted the type of question best suited for this design is one in which it is essential to understand several individuals' shared experiences of a phenomenon. Understanding these everyday experiences helps the researcher to develop policies or a deeper understanding of the features of the event.

Additionally, the researcher must identify a phenomenon and five to 25 individuals who have experienced the studied phenomenon and have access to interview each participant to capture the essence of the event. For this study of leader behaviors in ERP implementations, the researcher believed it was essential to learn from the leaders who experienced completing an ERP implementation; however, this research focused on fact-finding instead of the feelings and perceptions of the leader. Therefore, the phenomenological design was not the best option for this study.

According to Creswell and Poth (2018), the grounded theory approach moves beyond the description of a phenomenon generated during the narrative and phenomenology research approach and creates a theory that explains the process. Consequently, the grounded theory method is based on the data produced by the participants who experienced the process. The primary way of gathering information for the grounded theory approach is interviewing the participants and comparing the data from the participants with the idea of the emerging theory. Therefore, Creswell and Creswell (2018) highlighted that grounded theory approach is continuously analyzing the data of different groups to maximize the similarities and difference of information to generate a new theory based on the data collected. The purpose of this study was to explore leadership behavior theories in an ERP implementation, not to develop a new theory. Consequently, the grounded theory approach was not the best for this study.

Creswell and Creswell (2018) highlighted that the ethnography is studying a culture or social group to describe and interpret shared and learned patterns of values, behaviors, beliefs, and language. Creswell and Poth (2018) noted that ethnography involves extended observation of a group through participant observations. In this design, the researcher is immersed in the day-to-day lives of the individuals and observes and interviews the group members. For this

study, the researcher collected data over a short period as opposed to being immersed in the day-to-day lives of the leaders. Therefore, ethnography was not the best option for this study.

Summary of the nature of the study. The researcher selected the qualitative research method for this study of leadership behaviors and their relationship with ERP implementation at Army installations in the Mid-Atlantic region. The investigator chose this technique because the research needed a detailed understanding of the issue. This study presented a research question regarding how leadership behaviors affect the successful implementation of ERP, it did not seek to control the action of the study participants, and it focused on contemporary issues. Therefore, the case study approach was the most appropriate qualitative method for this study.

Research Question

This study explored the essential leader behaviors associated with the successful completion of an ERP implementation at an army installation in the Mid-Atlantic region. Shao et al. (2016) noted that the actions of the top leaders to unfreeze organizational routines, resolve interpersonal conflict, and innovate the use of the system is critical to successfully completing an ERP implementation. Similarly, Schniederjans and Yadav (2013) highlighted that change management and top management support are critical success factors in an ERP implementation. Therefore, to guide this study, the following research questions were utilized:

1. What are the specific leadership behaviors required to successfully complete an ERP implementation at an army installation within the Mid-Atlantic region?
2. How does the leader's education and experience contribute to a successful ERP implementation?
3. How does the leader's leadership style influence a successful ERP implementation?

Conceptual Framework

Selected theory. The researcher built the conceptual framework for this study upon the knowledge that leadership is a process whereby the leader influences and facilitates individual and collective efforts to accomplish a shared objective (Yukl, 2012). According to Yukl (2012), over a half-century of research provides the support that leaders can enhance the performance of their organization through their behaviors that are relevant to the situation. This behavioral approach to leadership resulted in the development of the behavioral leadership theory. Sampayo and Maranga (2015) noted that scholars based the behavioral leadership theory on the belief that leaders can be developed, and are not just born with inherent leadership characteristics. Therefore, this approach focuses on the leaders' actions, and not on their mental qualities, personal traits, or capabilities.

Finally, Al-Haddad and Kotnour (2015) noted that change had become the norm for organizations to sustain their success and existence. Therefore, industrial and governmental organizations are continually striving to align their operations with a changing environment. Kotter (1996) promoted a change method that allowed organizations to avoid failures in implementing change and increasing their chances of success. Kotter's eight-step method established a sense of urgency by relating the change to real potential crises, building a team trusted to support the change, having a vision and strategy, communicating the vision, implementing the change and planning short-term wins, consolidating the gains and constantly institutionalizing the change. Similarly, Spector (2013) noted that creating dissatisfaction with the status quo is the first step in implementing change. Second, members of the organization must move from one set of behaviors to another, and these new behaviors must become

permanent for the desired period. Finally, the final stage in implementing change is to institutionalize the different pattern of actions into a new status quo.

Sampayo and Maranga (2015) posited that individuals could become leaders through teaching processes and observation of the behavior of others. Therefore, behavioral leadership theory assumes leadership can be learned rather than it is inherent to the individual.

Additionally, Kotter (1996) noted there is a critical need for leadership to change an organization successfully. Since the purpose of this study is to understand the relationship between leader behavior and ERP implementation better, the behavioral leadership theory and Kotter's change method were the foundation for this study.

Historical behavioral studies. Pantouvakis and Patsiouras (2016) noted that Ohio State University and Michigan conducted two of the most important behavioral leadership studies. Ronald (2014) indicated that the Ohio State study developed the Leader Behavior Description Questionnaire (LBDQ) and found two general types of leader behavior: initiating structure and consideration. Stogdill (1974) highlighted that the initiating structure behaviors are task behaviors such as organizing work, defining responsibilities and scheduling activities; while the consideration behaviors are relationship behaviors such as respect and trust between leaders and followers. Similarly, Likert (1961) noted that the Michigan study also identified two leadership behaviors: production orientation and employee orientation. From this foundation, Pantouvakis and Patsiouras (2016) indicated that transformational leaders are visionary and use various means to motivate and engage their followers to achieve the desired results. On the other hand, Pantouvakis and Patsiouras (2016) noted that transactional leadership is task oriented and accomplishes goals before rewards take place.

Relationship of selected theory to the study. Leadership behavior supports a successful ERP solution. Shao et al. (2016) highlighted that top management support is one of the most critical factors in successfully implementing and sustaining an ERP. According to Shao et al. (2016), transformational leadership fits best with the adoption phase of the ERP, while transactional leadership supports the ERP implementation stage better. Shao et al. (2016) concluded that a variety of transformational and transactional leadership behaviors are most effective in the assimilation and extension phases of the ERP solution. Since there is a correlation between leader behaviors and organizational outcomes (e.g., successful implementation and sustainment of an ERP solution), the behavioral leadership approach guided the conceptual framework.

Discussion of relationships between concepts. Leadership behavior theory informed the expectations of the study in three ways. Yukl (2012) highlighted that an essential objective of leadership research is to identify the aspects of behavior that explains the leader's influence on the performance of a team or organization. The research questions for this study were:

1. What are the specific leadership behaviors required to complete an ERP implementation at an army installation within the Mid-Atlantic region?
2. How do the leader's education and experience contribute to a successful ERP implementation?
3. How does the leader's leadership style influence a successful ERP implementation?

These questions imply a correlation between leader behaviors and successful ERP implementations. Accordingly, Dezdar (2012) noted there is a positive relationship between top management support and a successful ERP implementation; and states that senior management

must take an active role in leading the ERP implementation project and commit resources to the implementation effort.

Secondly, the purpose of this study was to identify the specific leader behaviors that will better equip military and civilian leaders in addressing the problem of unsuccessful ERP implementations. Bennett (2016) posited that leadership is the behaviors and actions that a person takes. Therefore, the idea that leadership behaviors can be identified and taught to others is grounded in leader behavior theory. Figure 1 illustrates the relationship between leader behavior and a successful ERP implementation.

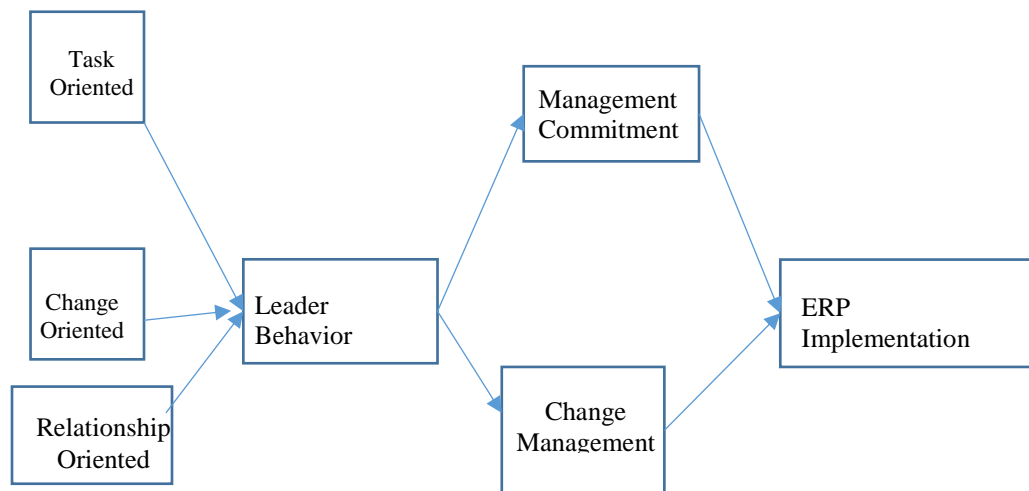


Figure 1. Conceptual Framework Model.

The researcher posited that there might be relationship-oriented behaviors and task-oriented behaviors necessary for a successful ERP implementation. Stogdill (1974) highlighted initiating structure behaviors that are inherently task-oriented behaviors, and consideration behaviors that are primarily relationship behaviors. Therefore, behavior theory supports both types of actions.

Management support and commitment are the most critical factors in a successful ERP implementation (Saade & Nijher, 2016; Garg & Agarwal, 2014; Pishdad & Haider, 2013).

According to Garg and Khurana (2017), ERP implementation should not depend on the project managers and consultants, but incorporate the support of the top management. Researchers defined management commitment in multiple ways. Garg and Agarwal (2014) concluded that top management support is characterized by providing valuable resources and controlling the whole implementing process. Garg and Chauhan (2015) recommended that the leader establish a clear vision, goal and business plan for the ERP implementation. Finally, Almajali, Masa'deh, and Tarhini (2016) found that top management must share decisions with employees and provide funding for worker training.

Pishdad and Haider (2013) highlighted that an ERP implementation changes how an organization operates and may initiate changes in the organizational culture. Therefore, Elkhani, Soltani, and Nazir Ahmad (2014) noted the leadership must guide the corporate culture because the culture plays an essential role in the ERP implementation. According to Ali and Miller (2017), Coeurderoy, Guilmot, and Vas (2014), and Abbasi, Zamani, and Valmohammadi (2014), the most critical behaviors that support an ERP implementation are those that support management commitment and change management.

Summary of conceptual framework. The researcher built the conceptual framework for this study upon the knowledge that leadership is a process that can be learned rather than the individual inherits it. This behavioral approach to leadership resulted in the development of the behavioral leadership theory. Since the purpose of this study was to understand the relationship between leader behavior and ERP implementation better, the behavioral leadership theory and change theory were the foundation for this study. Since there is a correlation between leader behaviors and organizational outcomes (e.g., successful implementation and sustainment of an ERP solution), the behavioral leadership approach guided the conceptual framework.

Definition of Terms

The focus of this study was the leader behaviors associated with successfully implementing an ERP in an army organization. The following terms are provided to clarify the intended use in the research.

Army Leader: an individual who inspires and influences people to accomplish organizational goals (U.S. Army, 2012).

Army organization: an organization under the command and control of the Department of the Army.

ERP: a set of software modules which integrate relevant applications of enterprise management and becomes a tool to support business processes (Kuo, 2014).

ERP implementation: an organizational effort directed toward distributing the appropriate ERP technology within a user community (Pan, 2017).

Leadership: the process of influencing people by providing purpose, direction, and motivation to accomplish the mission and improve the organization (U.S. Army, 2012).

Leader behavior: how leaders influence others to impact the performance of a team, work unit, or organization (Yukl, 2012).

Mixed method: combines both qualitative and quantitative methods in tandem. It involves philosophical assumptions, the use of qualitative and quantitative approaches, and the mixing of both approaches in the study.

Qualitative: a means for exploring and understanding the meaning individuals or groups ascribe to a problem. This process of research involves emerging questions and procedures, data collected in the participant's setting, data analysis derived from particulars to general themes, and the researcher interpreting the meaning of the data.

Quantitative: a means for testing theories by examining the relationship among variables. These variables are typically measured on instruments so that numbered data can be analyzed using statistical procedures.

Assumptions, Limitations, and Delimitations.

Assumptions. There were two fundamental assumptions made in this study. First, the researcher assumed that he would have access to the appropriate leaders in the army organizations and that the leaders accurately related the events incorporated with the ERP implementation in their organization. To ensure the most accurate information in this study, the researcher attempted to interview the most appropriate participants and conscientiously collected the data from the interviews, related documents, and document reviews. Secondly, the researcher assumed that the leader had completed the current increment of the ERP implementation in the army organization. The Army has an integrated ERP environment that is upgraded based on proven technology and user base changes that promote continuous process improvement of business processes. Therefore, the researcher reviewed this issue with the participants and ensured the current ERP implementation was complete in the organization.

Limitations. Two potential weaknesses of this study are the lack of generalizability and the challenge of gathering complete and accurate data from the study participants. Stake (2010) defined generalization as applying a statement to many or all cases. Creswell and Poth (2018) highlighted that generalizability has little meaning to most qualitative researchers. Creswell and Poth (2018) noted that one of the challenges in qualitative case study development is identifying the appropriate number of cases. Creswell and Poth (2018) posited that most researchers choose no more than four or five cases. This study looks at one army organization. Therefore, the generalization beyond the one case may be limited. Secondly, gathering complete and accurate

data from the participants was a potential limitation. To reduce this limitation from incomplete and inaccurate data, Yin (2014) noted that triangulation helps strengthen the validity of the case study. Yin (2014) defined triangulation as the convergence of data collected beyond from different sources to establish the consistency of the findings. Therefore, the researcher meticulously collected data from multiple sources to reduce this potential limitation.

Delimitations. The scope of this study was the behavior of leaders of Army organizations that have successfully implemented an ERP. Thus, non-army organizations and Army organizations that have not employed an ERP are outside the scope of this study. Additionally, the study examined the best leadership behaviors for implementing an ERP. These behaviors are the acts that the leader engages, in the course of implementing an ERP. This approach focused on the leaders' actions; therefore, the leader's mental qualities, personal traits, and capabilities were outside the scope of this study.

Significance of the Study

Reduction of gaps. The significance of this study was that the information might reduce the existing gap in the knowledge of critical leader behaviors needed for implementing an ERP solution in a military organization. Garg and Garg (2014) noted that many companies do not complete their ERP implementation on time and within budget. From a survey of 117 companies involved in an ERP implementation, Garg and Garg (2014) found that 25 percent of ERP projects were over budget, 20 percent of ERP projects were terminated before execution, and 40 percent of the respondents claimed that the ERP projects failed to achieve business objectives. Therefore, this study sought to reduce the gap between leader behavior theory and the effectiveness of an ERP implementation, to better prepare military and civilian leaders to make more efficient decisions regarding the implementation of an ERP solution.

Implication of biblical integration. This study addressed the topics of leader behavior and change management in an ERP implementation. Both the Old Testament and New Testaments of the Bible contain details about leader behavior and change management. Solomon highlights that good leader behavior focuses on the needs of others and helps them grow. Solomon recognized this principle of leadership. Solomon wrote, “If your enemy is hungry, give him food to eat; if he is thirsty, give him water to drink” (Proverbs 25: 21 New International Version). Solomon’s behavior focused on the need for others to influence their behavior. Solomon concluded, “In doing this, you will heap burning coals on his head, and the Lord will reward you” (Proverbs 25: 22 New International Version).

Similarly, Paul understood the crucial role of modeling the way for his supporters. As the Thessalonians turned from idols to serve the living and true God, Paul told the Thessalonians to become imitators of him and the Lord (1 Thessalonians 1:6). Paul exhibited proper leader behaviors and was a role model that the Thessalonians imitated. Likewise, the Thessalonians became an example to other believers in Macedonia and Achaia (1 Thessalonians 1:7). Through exemplary leader conduct, the Lord’s message spread. Paul said, “The Lord’s message rang out from you not only in Macedonia and Achaia- your faith in God has become known everywhere” (1 Thessalonians 1:8 New International Version).

Additionally, the study addressed the topic of change management. Change is an integral part of growth. The Scripture focuses on change because all believers are in the process of becoming the person God intended them to be. Abraham experienced significant change through his encounters with God. God said to Abram, “Go from the country, your people and your father’s household to the land I will show you” (Genesis 12: 1 New International Version). This type of revolutionary change created great stress; however, Abraham believed in the Lord, and

that confidence allowed Abraham to pursue necessary change. Through this radical change in Abraham's life, God created the Abrahamic covenant that would be an instrument to bless all of the people on the Earth. God said, "I will make you into a great nation, and I will bless you; ... I will bless those who bless you and whoever curses you I will curse, and all peoples on earth will be blessed through you" (Genesis 12 2-3 New International Version). Therefore, God changed Abraham's career, thoughts, and purpose and blessed all the people on the Earth.

Finally, change is inherent in leadership. Through a vision to Peter, God introduced organizational change into the Jewish church at Jerusalem by urging them to embrace the Gentiles. God told Peter to get up and kill the unclean animals and eat. But Peter resisted and said he had never tasted anything unclean. God responded and told him not to call anything He made unclean (Acts 10:13-15). God allowed Peter to resist and gave Peter time to adapt to the change. Finally, Peter recognized the improvements the change brought. Peter said, "So if God gave them the gift he gave us who believed in the Lord Jesus Christ, who was I to think that I could stand in God's way?" (Acts 11:17 New International Version). God gave Peter a vision to bring the Jewish and Gentile believers together; therefore Peter became the champion for change in the church. The Jewish believers praised God and said, "So then, even to Gentiles God has granted repentance that leads to life" (Acts 11:18 New International Version). Therefore, noble leaders help others recognize the need for change.

Relationship to field of study. The author's field of study is leadership. This review was directly related to leadership and explored how the leader can implement an ERP solution in their organization. Saade and Nijher (2016) concluded that the behavior of active and committed leaders is one enabler that contributes to a successful ERP implementation. Since the focus of this study was on leader behavior, the behavioral approach to leadership was the specific theory

integrated into this study. Landis, Hill, and Harvey (2014) highlighted that behavioral theory replaced the conception that leadership was due to persuasion with the analysis that the observable behavior of leaders changed the behavior of followers. Additionally, Landis et al. (2014) noted that if a leader demonstrates affirmative action toward a subordinate, the workers' performance improves.

Change management is another aspect of leadership associated with this study. Exter, Grayson, and Maher (2013) highlighted that change management theory offers clear guidance on driving change in organizations regardless of the modification that is needed. According to Spector (2013), effective change involves both context and process. Similarly, Exter et al. (2013) highlighted that change management models recommend specific steps of change that an organization must complete in sequence. Therefore, this study of leadership behaviors in ERP implementation incorporated the element of change management.

Summary of the significance of the study. This review was directly related to leadership and explored how the leader can implement an ERP solution in their organization. Therefore, the significance of this study was that the information might reduce the existing gap in the knowledge of critical leader behaviors needed for implementing an ERP solution in a military organization, and better prepare military and civilian leaders to make more efficient decisions regarding an ERP implementation. Both the Old Testament and New Testaments of the Bible supported this study and contained details about leader behavior and change management in an organization.

A Review of Professional and Academic Literature

The purpose of this literature review was to provide a basis for an understanding of the relationship between leader behavior and ERP implementation. The author explored the

literature to learn about the connection between leader behavior and organizational outcomes and examine ERP literature to comprehend the relationship between leader behavior and successful ERP implementation.

Rowley and Slack (2004) noted a literature review should utilize and assess a variety of different types of sources including academic and professional journals, books, and web-based resources. In this literature review, the author used scholarly peer-reviewed journal articles, professional papers, reports, and various online databases including ProQuest Central, ABI/Inform, Emerald, and Business Source Complete. The researcher limited his review to full text scholarly peer-reviewed journal articles, textbooks, and reports to ensure the quality of the resources. The academic peer-reviewed journal articles formed the core of this literature review. These journal articles included a literature review, a discussion of the research methodology, an analysis of results, and statements on recommendations and conclusions. The experts assessed the peer-reviewed articles in their respective field for accuracy, the validity of the research methodology, and procedures. The authorities' examination of the scholarly articles gave credibility to the research sources and contributed to the quality of this literature review.

The first primary section of this study is leadership. This section consists of four sub-sections: (a) Leadership Definition; (b) Leadership Theory Development; (c) Trait, Skill, Behavior, and Situation; and (d) Behavior Theory Examination. The second significant section of this study is Leader Behavior and ERP Implementation. This second section consists of two sub-sections: ERP overview and Leader Behavior that Supports ERP Implementation.

Leadership. Leadership is defined in many ways; therefore, there is no single universally accepted definition. Silva (2016) noted there are approximately 1,400 different definitions of the word leader and or leadership. According to Silva (2016), the concept of

leadership has evolved. Silva (2016) noted that leadership is more than an individual trait but that it is a complex phenomenon, in which both, the followers and the context play a critical role. This overview of leadership examined the definition of leadership and several theories of leadership.

Leadership definition. McCleskey (2014) highlighted that a single definition of leadership is pointless. Among multiple definitions and conceptions, the correct interpretation of leadership depends on the specific aspect of the leadership of interest to the individual. Therefore, Koohang and Hatch (2017) defined leadership as “a process, whereby an individual influences a group of individuals to achieve a common goal” (p. 385). Similarly, Halliman (2014) noted that leadership is “the process of influencing the activities of an individual or a group in efforts toward goal achievement in a given situation” (p. 70). Both of these definitions emphasized four components of leadership: process, influence, group of people, and a common goal.

Consequently, the person performing these elements of leadership was the leader and the leader directed these aspects to the followers. According to Silver (2016), process implied that a leader affected and was affected by the follower. Therefore, influence addressed how the leader moved the follower. Groups were the setting in which leadership took place, and shared goals meant leaders and followers have a mutual purpose. Thus, this perspective of leadership created influence and accomplished goals through process-orientation and relationship-practices.

Similarly, U.S. Army (2012) defined leadership as the process of influencing people by providing purpose, direction, and motivation to accomplish the mission and improve the organization. While personal traits and skills affect a process, the U.S. Army (2012) highlighted that leadership does not just happen by chance, but a leader develops the appropriate leadership

behavior. Therefore, leadership is a process that can be learned, monitored and improved. Additionally, the U.S. Army (2012) noted that leadership enhanced an organization. The U.S. Army (2012) stated that leadership provides focus and synchronization to an organization. Consequently, the organization uses resources more efficiently, motivates people more effectively, and is more likely to achieve its desired outcomes. These defining elements of leadership identified the leaders that were the focus of this research.

Leadership theory development-trait, skills, situation, and behavior. Throughout the previous decades, the definition of leadership has changed. Cote (2017) noted that leaders are considered the saviors and heroes for organizations in crisis and that research supports the argument that effective leadership is essential in an organization. Consequently, researchers have developed and explored various theories of leadership. According to Gandolfi and Stone (2017), the most widely accepted and practiced approaches to leadership are trait, skill, situational and behavioral.

Trait approach. The trait approach was one of the first attempts to study leadership. Cote (2017) noted that the trait approach has over 100 years of research data that emphasizes the critical role of traits in the leadership process. These theories were called “great man” theories because they focused on the innate qualities of great leaders. Ghasabeh, Soosay, and Reaiche (2015) noted that the leader trait perspective recommended an approach in which great men and women with specific traits influence followers to do what the leader wishes to achieve a group goal. Ronald (2014) highlighted that the Great Man Theory argued that leaders were born, not made.

The research revealed many critical leadership traits. Cote (2017) highlighted five key leadership traits, which included extroversion (outgoing), conscientiousness (dependable),

openness to experience (innovative and creative), emotional intelligence (self-esteem, self-confident, and predictable), and agreeableness (warm, friendly, and approachable). Additionally, Cote (2017) noted that leaders with the traits of honesty and integrity were more successful in developing trust and respect with followers.

Skills approach. Following the traits approach, leadership research shifted its focus from the innate personality traits to a skills approach. Although the skills approach is leader focused, it emphasized skills and abilities that can be learned and developed by the leader. Katz (1955) noted that it is not a leader's traits or personality characteristics that are important, but what the leader can accomplish. Katz (1955) posited that what a manager can achieve is based on the skills that the leader possesses. Peterson and Van Fleet (2004) defined skill as the ability to either perform some specific behavioral task or the ability to accomplish some particular cognitive process that is functionally related to some specific function. The core managerial skills were not inborn personality traits but were abilities that could be developed and learned. Therefore, Katz (1955) established three necessary skills for leaders: technical, human, and conceptual.

Similarly, Muthuveloo, Chiek, and Ping (2017) found that technical skill, human skill, conceptual skill, communication skill, and emotional intelligence skill were strongly related to leadership effectiveness. Muthuveloo et al. (2017) noted there should be a positive relationship between the level of management and leadership skill requirements. Katz (1955) defined technical skill as analytical ability and the ability to use tools and techniques. Therefore, technical expertise is fundamental and is the most critical skill at the entry level of an organization. Just as the technical skill is working with things, human skill is the ability to work with followers, contemporaries, and superiors to complete a mission. However, as the leader

progresses higher up the leadership hierarchy, the significance of the technical skill diminishes; therefore, for top management, such as chief executive officers (CEOs), vice presidents, and senior officers, technical competencies become less critical. Muthuveloo et al. (2017) recommended that senior leaders depend more on skilled subordinates to handle the technical issues and that senior leaders should apply their value, behavior and time to focus on systemic and strategic matters, which would then require a conceptual skill. Muthuveloo et al. (2017) concluded the higher a leader goes in an organization, the more critical conceptual ability is in leading the company.

Situational approach. Another perspective on leadership is the situational approach. Thompson and Glasø (2015) defined the Hersey-Blanchard Situational Leadership Model as a framework for aligning leadership behavior with the follower's personal development. For the follower who is low on competence but high on commitment, a directive style of leadership is appropriate. For the follower who has some skill with little determination, the model recommends a coaching style of leadership. For the follower who has high competence and low commitment, a supporting style of leadership was appropriate. Finally, the member with considerable expertise and commitment responds best to a delegating style of leadership. Gandolfi and Stone (2017) highlighted that situational leadership theory deals with the follower's readiness for where the leader is attempting to take them and the organization. Therefore, many forces are trying to match the appropriate leader within a given organizational situation.

Ghasabeh et al. (2015) highlighted that situational factors impact the effectiveness of leadership; therefore, leadership does not reside in the person; it is a function of the whole situation. Unlike trait and skills theories, Ghasabeh et al. (2015) noted there was no best leadership approach for all circumstances. Krogerus and Tschäppeler (2012) indicated the most

important thing was for the leader to adapt their leadership style to the situation. Therefore, leaders should consider the impact that situational variables can have on the effectiveness of a leader's behavior.

Behavioral approach. Ruiz, Hamlin, and Gresch (2017) noted that most of the leadership effectiveness-related studies conducted to date focused on the behavioral approach to leadership. This approach focuses on how leaders engage in task behaviors and relationship behaviors. Rowold, Borgmann, and Diebig (2015) described the relationship-oriented behavior as the concern that leaders provide for the needs and well-being of their subordinates. Task-oriented behavior reflects the degree to which a leader plans and defines roles to be performed in a task, clarifies responsibilities and performance objectives, and monitors operations and performance.

Therefore, the behavioral approach has expanded leadership research and includes the actions of leaders toward followers in various contexts. The behavioral approach emphasizes the style of the leader. Rowold et al. (2015) determined that the relationship-oriented construct aligns with transformational leadership and that the task-oriented perspective overlaps with transactional leadership. Ghasabeh et al. (2015) highlighted that the behavioral approach aims to portray the best leadership style in regards to task and people and to illustrate the behaviors of effective leaders.

Selected theory of this study-behavioral theory. The behavioral approach was the leadership perspective that was most applicable to this study of leader behavior and ERP implementation. The purpose of this study was to examine leadership behaviors and their relationship with ERP implementations and to identify the specific leader behaviors that equip executives in addressing the problems within an ERP implementation. On a conceptual level, Rowold et al. (2015) highlighted that when leadership occurs, the leader is acting out of both

relationship and task-oriented behaviors. Therefore these two behaviors form the core of leadership.

Since the purpose of this study was to identify specific leader behaviors that aid in completing an ERP implementation, leaders can assess their actions and improve their leadership behavior. This study was better suited for the behavioral approach than the trait, skill, or situational approach.

Ronald (2014) highlighted that the trait approach focuses on the innate qualities of leaders. Therefore, the trait approach was not appropriate because it was not suitable for leader development. Second, Gandolfi and Stone (2017) noted that the trait approach does not account for the environment inside and outside the organization and the employees and their interaction with leaders in the organization. Therefore, the trait approach does not consider a significant portion of ERP implementation in an organization. This shortsighted view of leadership disqualifies the trait approach as the best approach for this study.

Similar to the trait approach, the skills approach takes a leader-center perspective of leadership. However, Gandolfi and Stone (2017) noted that the skills approach is counter to trait theory in that the skills theory states that leaders develop leadership ability through the intentional approach of building technical, human, and conceptual skills. Therefore, the skilled approach highlighted that leaders are made and not born. Nevertheless, Northouse (2016) noted that the individual attributes component of the skills approach is trait driven, and that shifts the model away from being a behavioral approach to leadership. The skills approach needs to be expanded to incorporate the organizations and people; therefore, it was not an appropriate model for this study.

Finally, the situational approach does not explain what a leader should do if there is not an alignment between the leader's style and the follower's commitment and development in the workplace. However, with the behavioral approach, Vance (2017) noted that leaders could be taught new behaviors that prepare the leader for a situation such as ERP implementation. Therefore, the behavioral approach is the leadership perspective that was most applicable to this study.

Bennett (2016) noted that leadership is not permanent, but it is the behaviors and actions that a leader takes. Therefore, improper conduct or perception of impropriety can destroy all of the good a leader has accomplished. This overview of behavioral theory examines the history of behavioral theory, the behavioral theory taxonomy, and the relationship between leader behavior and organizational outcome.

History of behavioral theory. Rowold et al. (2015) noted that the behavioral approach focuses on what leaders do and how they act. This method also expands leadership and includes the impact of leaders towards followers. Likewise, Yukl (2012) highlighted that a principal objective in much of the leading research is to identify aspects of behavior that explains the leader's influence on the performance of an organization. Ronald (2014) noted that the Iowa studies stopped focusing on traits and starting focusing on leaders' actions in their leadership role. In the Iowa study, Lewin, Lippitt, and White (1939) concluded that leaders performing their leadership roles as an authoritarian leader, democratic leader or laissez-faire leader generated different group outcomes. Gandolfi and Stone (2017) highlighted that most leadership scholars tie their work back to Lewin et al.'s pioneering work with these three overarching leadership styles.

Additionally, Gandolfi and Stone (2017) noted most of the emerging leadership approaches have their roots in one of Lewin et al.'s three categories. Ronald (2014) highlighted that the Iowa study was a milestone in organizational behavior and preceded the Ohio State Leadership Studies, the University of Michigan Leadership Studies, and the Leadership Grid examining the behavioral leadership approach. These studies are the foundation for behavior theory.

Ronald (2014) noted that the Ohio State study used the Leader Behavior Description Questionnaire (LBDQ). Ghasabeh et al. (2015) indicated that the LBDQ used 150 questions that reflected the essential functions of a leader. The authors of the study administered the questionnaire to hundreds of people in education, military, and industry. Stogdill (1974) noted that the responses to the survey clustered around two types of leader behavior: initiating structure and consideration. The initiating structure behaviors included organizing work, giving structure to work, defining roles and responsibilities, and scheduling work activities. The consideration behaviors are relationship behaviors between leaders and followers and include camaraderie, respect, and trust. Ronald (2014) noted that initiating structure and consideration are not mutually exclusive and that successful leaders exhibit both behaviors.

Approximately two years after the Ohio State studies began, researchers at the University of Michigan conducted a third behavioral approach to leadership by asking how a leader acts. Likert (1961) identified two essential leader behaviors; production-oriented behavior focused on attaining goals, and employee-oriented behavior concentrated on interpersonal relationships. Ronald (2014) highlighted that the results of the Michigan study were similar to the Ohio State studies with their initiating structure and consideration dimension; however, the Michigan studies were one dimensional. Therefore, unlike the Ohio State studies, the Michigan studies

asserted that the leader could not be both production-oriented and employee-oriented. This dimensional difference was a crucial difference between the two studies. Accordingly, Likert (1961) suggested a third behavior, a participative leadership style. Likert (1961) highlighted that the participative style pays attention to both task-oriented and relationship-oriented action. Therefore, Likert (1961) noted that the participative style demonstrates some behavioral aspects such as being supportive, collaborative and cooperative and is highly oriented toward accomplishing high performance.

Both the Ohio State studies and the Michigan studies influenced leadership research and the development of the managerial grid. Consequently, Covey and Ewell (2015) noted that the Blake and Mouton (1964) managerial grid is one of the iconic theories in the study of management techniques. Covey and Ewell (2015) highlighted that the leadership grid characterizes five different leadership styles, based on the concern for people and production: impoverished managers, authority obedience managers, country club managers, organization man managers, and team managers. On this grid, the horizontal axis represents the leader's concern for production, and the vertical axis denotes the leader's care for people. At the bottom left side of the grid sits the impoverished managers (1, 1) who have low interest in production and little concern for people. In the opposite corner of the grid are the authority-obedience managers. Authority-obedience managers (9, 1) have a high interest in production and low care for people. In the middle of the network are the organization man managers (5, 5). The organization man managers tend to avoid real issues. These managers have modest concern for production and moderate concern for people. In the upper left-hand corner of the grid are country club managers (1, 9). They have minimal worry about production and extraordinary concern for people. In the top right-hand corner, are the team managers (9, 9), who show high

interest in both production and people. The team manager is considered one of the best approaches to management. The Blake and Mouton (1964) managerial grid is a practical model of leadership focused on the two leadership behaviors of task and relationship. They later transformed the managerial grid into the military leadership grid (Blake, Mouton, & Bryson, 1980). The basic framework for the new theories in military leadership was depicted as a function of the relationship for improving the performance of the military between the two dimensions of people and mission.

Behavioral theory taxonomy. Gupta and Singh (2013) highlighted that a large number of specific leader behaviors acknowledged in leadership makes it difficult to integrate results across studies. As described in the previous sections, from 1950 to 1980, early leadership research in behavioral theory categorized leader behavior as task-oriented and relationship-oriented. However, Yukl (2012) highlighted that research indicates that leader behavior should include other meta-categories. The four meta-categories that capture the primary leadership behaviors that influence the performance of an organization are task-oriented, relationship-oriented, change-oriented, and external. Also, Yukl (2012) identified 15 leader behaviors associated with these four meta-categories and developed a comprehensive behavioral taxonomy (see Table 1). Yukl (2012) noted that leader-behavior categories should be observable, distinct, measurable, and relevant for many types of leaders. Vance (2017) indicated that Yukl's taxonomy enhances the ability of researchers to consistently and universally categorize the leader behaviors that most significantly improve a leader's effectiveness. Similarly, Ruiz et al. (2017) revealed that all of the actions highlighted in Yukl's taxonomy are found to have a positive correlation with leadership effectiveness.

Table 1. *Yukl's Hierarchical Taxonomy of Leadership Behaviors*

Categories	Behaviors	Examples of Behavior
Task-oriented Primary Objective is to accomplish work in an efficient and reliable way	Clarifying	Explaining work responsibilities; assigning tasks; communicating objectives, priorities, and deadlines; setting performance standards; and explaining any relevant rules, policies, and standard procedures
	Planning	Making decisions about objectives and priorities, organizing work, assigning responsibilities, scheduling activities, and allocating resources among different activities
	Monitoring operations	Directly observing activities, examining recorded actions or communications, using information systems, examining required reports, and holding performance review sessions
	Problem-solving	Dealing with disruptions of normal operations and member behavior that is illegal, destructive or unsafe
Relations-oriented The primary objective is to increase the quality of human resources and relations	Supporting	Showing concern for the needs and feelings of individual team members, listening carefully when a member is worried or upset, providing support and encouragement when there is a difficult or stressful task, and expressing confidence that someone can perform a difficult task
	Developing	Providing helpful career advice, informing people about relevant training opportunities, making assignments that allow learning opportunities, providing developmental coaching, providing opportunities to apply new skills
	Recognizing	Presenting an award in a ceremony; recommending a pay increase or bonus
	Empowering	Giving employees more autonomy and influence over decisions; asking others for ideas and suggestion before making a decision; giving individuals the authority to make decisions
Change-oriented Primary objectives are to increase innovation, collective learning, and adaptations to the external environment	Advocating change	Providing information that demonstrates the need for change; explaining undesirable outcomes if the change is not made; involving employees in the change process
	Envisioning change	Articulating a clear vision;
	Encouraging innovation	Encouraging people to look at problems from different perspectives; thinking outside the box; finding ideas from other fields that can solve problems; creating a climate of trust in suggesting new ideas
	Facilitate collective learning	Collecting lessons learned; supporting research projects and experiments; implementing after-action reviews and benchmarking; providing resources for testing new ideas
	Networking	Attending a meeting, professional conferences, and ceremonies; joining relevant associations, clubs, and social networks;

External Primary objectives are to acquire necessary information and resources and to promote and defend the interests of the organization		communicating with network members; encouraging networking by subordinates Studying relevant publication and industry reports; conducting market research; studying the decisions and activities of competitors and opponents; Lobbying for resources and assistance; promoting and defending the reputation of the team or organization; negotiating agreements; coordinating related activities
	External monitoring	
	Representing	

Through meta-analysis, Borgmann, Rowold, and Bormann (2016) confirmed the suitability of Yukl's integrative leadership taxonomy with three meta-categories (task, relations, and change behavior). Borgmann et al. (2016) noted that Yukl's taxonomy has summarized findings from five decades of research and integrates different leadership behaviors into a meaningful conceptual framework. Furthermore, Borgmann et al. (2016) highlighted that a researcher could use Yukl's taxonomy as a starting point for the further development of leadership effectiveness.

Yukl (2013) noted that some types of leader behavior in a meta-category affect more than one objective. For example, Yukl (2013) highlighted that a leader consults with team members about an action plan for a project. This leader's behavior may result in more commitment to the project (relation-oriented) and better use of personnel and resources (task-oriented). Therefore, the leader may discover more innovative ways to satisfy the customer (change-oriented). This taxonomy assist leaders in categorizing and understanding which leader behaviors are most likely to enhance their effectiveness in an organization.

The relationship between leader behavior and organizational performance. In addition to the classification of leader behaviors examined in the previous section, this study examined the relationship between leader behavior and organizational performance. Sirisetti (2011) noted

that an effective leader is essential for outstanding organizational performance. Leaders do many things to determine organizational outcomes. Zeb, Ahmad, and Saeed (2018) highlighted that effective corporate leaders develop progressive corporate cultures, develop motivated employees, clarify vision and corporate objectives, and guide the whole efforts towards high organizational performance and outcomes. These actions align with leader behaviors noted in Yukl's taxonomy. Yukl (2012) posited that leaders use leader behaviors such as task-oriented, relationship-oriented, change-oriented, and external behaviors to influence groups and organizations. According to Yukl (2013), the second approach for leaders to impact organizational performance is to decide on a competitive strategy, organizational structure, and management programs. Similarly, Zeb et al. (2018) noted that effective leadership leads to effective organizational performance because leadership creates a vital link between people, process, and procedures in an organization that leads to better corporate performance.

Although leadership originates from a person, Tognazzo, Gubitta, and Gerli (2017) highlighted that leadership dynamics play out at multiple hierarchical levels within an organization. According to Tognazzo et al. (2017), leaders' actions that affect organizational effectiveness emerge from the factors of efficiency, human capital, and the ability to adapt to the external environment. Additionally, Tognazzo et al. (2017) noted that it is essential to consider that these factors are contextual (i.e., firm-specific situational variables) and intertwined (i.e., most effects of human capital on firm performance are themselves affected by efficiency and the ability to adapt); in other words, the leader should consider these factors from an overall organizational perspective. Therefore, Tognazzo et al. (2017) posited that the three types of leadership behaviors, task, relationship, and change-oriented behaviors, have implications for

organizational performance. This study examined the leader behaviors essential to a successful ERP implementation.

Leader behavior and ERP implementation. To better understand how leaders in military organizations utilize specific actions to implement an ERP solution in their company successfully, the researcher examined ERP implementation literature. Huang and Yasuda (2016) highlighted that the roots of ERP systems go back over a half of century. With the development of information technology and the demands from organizations, ERP systems have covered nearly all of the essential processes and functions of organizations for over two decades. The examination will begin with an overview of ERP, review the benefits of an ERP solution, and examine the challenges associated with implementing an ERP in an organization. This review of the ERP literature precedes an in-depth investigation of the critical relationship between the leader's behaviors and a successful ERP implementation. Shao et al. (2016) highlighted that leadership ranked as the number one facilitator of large ERP implementations. Shao et al. (2016) noted that top executives who want to implement an ERP system must be able to articulate a clear vision of ERP implementation for the organization, the objectives of adopting the ERP system, and to communicate the vision and goals to the entire organization.

ERP overview. ERP is one of the significant information technologies that have reshaped business practices. An ERP implementation plays a critical role in managing an organization's supply chain. Hwang and Min (2015) credited the ERP implementation with improving inventory records and bills of materials accuracy, achieving on-time delivery, and reducing the inventory throughout the supply chain. If successfully implemented, Hwang and Min (2015) highlighted that the ERP creates value by integrating the organization's multiple business activities into a single system, facilitating organizational standardization, increasing information

sharing of online and real-time information, improving corporate communication and collaboration both internal and external, and enhancing decision-making capabilities.

Carutasu and Carutasu (2016) defined ERP as a software application that uses the same database for the entire company and integrates an organization's business processes and optimizes the company's available resources. These procedures include the functionalities of accounting, business intelligence, customer relationship management, human resources, inventory management, manufacturing, and supply chain management. Similarly, Hwang and Min (2015) described an ERP as an information technology solution that coordinates and integrates company-wide business processes with a shared database and shared reporting tools. Revenaugh and Muretta (2013) described ERP as the critical link for enhancing integration between all functional areas in an enterprise and between the enterprise and its trading partners. However, Abbasi et al. (2014) noted that an ERP is not just a software package, but that it is an experience that influences how people work and often imposes its logic on a company's strategy, organization, and culture.

Hwang and Min (2015) defined an ERP implementation as a company's objective to adapt, configure, and integrate the information flow and business processes necessary to support each business department and their functions within an organization by collecting and storing real-time data with the company's information technology architecture. Ram, Corkindale, and Tagg (2016) described a successful ERP implementation as when the ERP system and its related components and interfaces are operational, and the project meets the users' expectation and is delivered on schedule and within budget. Hwang and Min (2015) highlighted that the successfully implemented ERP could create value by integrating the firm's diverse business activities into a single system, facilitating organizational standardization, increasing access to

online and real-time information, improving corporate communication and collaboration, and enhancing decision-making capabilities. Ram et al. (2016) distinguished between a successful ERP implementation and ERP organizational performance improvements by evaluating the increase in organizational performance as a measured outcome of the ERP implementation.

ERP benefits. Even though the benefits from an ERP implementation vary from organizations to organization, research explicitly addresses the benefits an organization may gain from an ERP system. Ali and Miller (2017) suggested that ERP systems enhance information coordination, by integrating data flow across different departments in an organization. Ali and Miller (2017) highlighted that the benefits include time and cost reduction in processes, faster transaction processing, operational performance improvement, financial management, customer services, and more effective communication. Therefore, an ERP implementation improves organizational performance, enhances information sharing, and advances business processes.

Revenaugh and Muretta (2013) highlighted that nearly all Fortune 500 companies are implementing ERP systems to improve the execution of their business strategy and better integrate their business strategy with their information technology strategy. According to Kim and Mouritsen (2013), ERP implementations are capital investments that potentially enhance efficiency and improve financial performance. Despite the high implementation cost, Ali and Miller (2017) noted there is no evidence of persistent negative organizational performance associated with an ERP investment. ERP solutions likely increase the profitability of firms, their return on assets, and operating income, and reduce the cost of goods sold. Abbasi et al. (2014) pointed out there is a positive and significant relationship between implementing an ERP and non-financial performance and suggest there is a positive impact on both current and long-term return of assets and stocks.

Second, Kim and Mouritsen (2013) highlighted that ERP solutions could create new connections between organizational functions and create an integrated workflow across the organization. These new links allow data-sharing and coordination in real-time between the different corporate features represented by the ERP modules within the company. Similarly, Abbasi et al. (2014) noted the most significant benefit of an ERP implementation is the software integration, the increase in information exchange, and the improvement in the quality of organizational reports. These new relationships extend corporate decision making by promoting real-time information availability, extending organizational performance by informing users when activities are due, increasing transaction speed, and by stabilizing practices. Accordingly, Abbasi et al. (2014) highlighted organizations implement ERP systems to improve decision-making processes, increase the company's access to real-time data and to keep up with the increase in their competition.

Finally, Kim and Mouritsen (2013) noted that process redesign is a prerequisite for successfully adopting an ERP solution. Therefore, implementing an ERP solution is related to processes of change and moves the organization's operations to best business practices. Since the ERP affected how people work, it created a structure where leaders design new jobs and develop new user competencies. Gavidia (2016) highlighted that the most significant benefit of an ERP implementation is the change induced by the implementation process. The team leader must have enough knowledge about the organization and its environment to be able to envision change. The organization must have the flexibility to be able to implement the change. Therefore, an ERP improves coordination and the organization's capability to adapt to changing conditions.

Implementation challenges. Stanciu and Tinca (2013) documented that the extreme effort and difficulties related to an ERP implementation and the associated organizational change, have given ERP implementation projects a notorious reputation of going over budget, not being delivered in time, achieving only partial implementation, or resulting in total failure. Carutasu and Carutasu (2016) highlighted that the average ERP solution costs over \$6.1 million and requires 15.7 months to implement. Kuo (2014) noted that ERP implementation could range from six months to three years depending on the enterprise size. However, within the U.S. Army results have been more extreme. The U.S. Government Accountability Office (2010) noted that one of the Army ERP systems intended to manage inventory and maintenance operations had cost over \$1 billion and were still incomplete five years after its scheduled implementation.

Park and Park (2015) highlighted that many organizations have experienced enormous problems in an ERP implementation and reported that less than 30 percent of ERP implementations are successful. The researcher noted that a corporation might not realize the benefits of an ERP implementation for one to five years. Park and Park (2015) highlighted there could be a decrease in the overall firm performance during the earlier phase of an ERP implementation, and it can take several years to capitalize on the ERP investment fully. Additionally, Abbasi et al. (2014) noted that the functionality of the implemented ERP averages 41 percent of the desired business capability required by the organization.

Pishdad and Haider (2013) highlighted that in many organizations, top management views an ERP implementation as a technical challenge; however, an ERP implementation is a process of aligning technology with organizational, social, cultural, economic, technological, and other corporate institutions. For example, Ali and Miller (2017) highlighted that ERP system software incorporates best business practices; therefore, implementing an ERP system requires

organizations to re-engineer their business processes around the ERP software. This conflict raises the question of what should happen to the legacy systems and how should the organization revise their business processes. Similarly, Pishdad and Haider (2013) noted that an ERP implementation replaces the legacy information technology infrastructure in an organization; therefore, removing these legacy information systems results in a significant institutional change, eroding the existing organization and creating a new organization.

Additionally, Leger, Riedl, and vom Brocke (2014) highlighted that the re-engineering of the business processes during ERP implementation alters the decision rights of the employees along with the business processes. Therefore, managers of organizations structured around functional units are likely to experience an erosion of decision authority in favor of business champions who oversee the operational performance of the corporation across executive functions. There are many challenges associated with an ERP implementation. Garg and Khurana (2017) identified 36 risk items that created difficulties in an ERP implementation and grouped these items into six categories; user risk, project management risk, technological risk, team risk, organizational risk, and project performance risk.

The user is a challenge in an ERP implementation. Dezdar and Ainin (2011) defined this factor as educating the user on the new business processes and training the employee on the ERP software. Additionally, Dezdar and Ainin (2011) noted this challenge captures the employees' resistance to change and their unwillingness to share information with the ERP implementation team. Consequently, Dezdar and Ainin (2011) highlighted that not involving the users in the ERP implementation may lead to a lack of ownership on the employee's part and lead to an unsuccessful implementation.

The second factor that is a challenge in an ERP implementation is project management. Garg and Khurana (2017) noted that the project management challenge in ERP implementation is similar to any software project implementation. Garg and Garg (2014) highlighted that completing an ERP implementation according to the schedule requires close monitoring and controlling of the time and costs. It is also essential for the project management team to appropriately plan the ERP implementation; otherwise, delays may lead to an unsuccessful execution. Similarly, Dezdar and Ainin (2011) noted that defining the scope, time, and specification of the ERP implementation is essential to the project's success.

Third, technology is a challenge in an ERP implementation. Garg and Khurana (2017) noted this factor demands the ERP strategy aligns with the business strategy and the information technology infrastructure. Garg and Garg (2014) highlighted that ERP software is an extensive product requiring an expansive information technology infrastructure. According to Garg and Khurana (2017), if a significant amount of customization is done to the ERP software to keep the business process re-engineering low, it will lead to an excessive change in the product and will increase the time required for the implementation and increase the cost. Therefore, it is essential that the appropriate ERP software is selected based on organizational requirements and business processes.

Fourth, an adequately equipped project team is a significant challenge in an ERP implementation. Garg and Khurana (2017) noted the leadership should provide the group with experienced members from the organization, vendor's team members, technical and functional experts, and that an experienced project manager should lead the group. Garg and Garg (2013) highlighted that attrition from the implementation should be kept to a minimum to prevent delays

in the ERP implementation. Additionally, implementation delays increase the demands for resources and challenges for completing the ERP changeover.

Fifth, there are organizational challenges in an ERP implementation. Garg and Garg (2014) noted that an organization must have a clear understanding of the potential risk in an ERP implementation and devise an appropriate strategy. Garg and Garg (2013) highlighted that top management support is critical through all stages of an ERP implementation, from the identification of the ERP software, to defining ERP requirements, to implementation and post-implementation support. Garg and Khurana (2017) posited that the complexity of the ERP project, instability of project objectives, and the newness of the ERP technology could lead to the attrition of personnel in the organization. The uncertainty within an organization during an ERP implementation is a challenge to the ERP project.

Finally, project performance is a challenge in an ERP project. Huang, Chang, Li, and Lin (2004) noted that this challenge refers to the various changes in an ERP implementation which cause conflicts between different departments. Consequently, poor interdepartmental coordination may lead to delays and an unsuccessful ERP project. Kim, Lee, and Gosain (2005) posited if there is a lack of documentation and the functional departments are frequently changing their requirements, it is a significant impediment to the ERP implementation.

According to a survey of 117 organization, Garg and Chauhan (2015) noted that 40 percent of ERP projects fail to meet the requirements of the business case. Garg and Chauhan (2015) highlighted that another study done by information technology (IT) management consultancy Robbins-Gioia LLC substantiated the previous survey, and found that 51 percent of companies across a wide range of industries stated that their ERP implementations were

unsuccessful. Therefore it is critical for leaders to fully understand the factors which lead to a successful ERP implementation.

Leader behaviors that support ERP implementation. A successful ERP implementation is mainly dependent on the leader's behavior (Garg & Chauhan, 2015). Similarly, Usmanij, Chu, and Rajiv (2013) noted that implementation challenges related more to behavioral and management issues than to technical difficulties. Peng and Gala (2014) pointed out that an ERP implementation reshapes an organization's culture, structure and processes, as well as changes the distribution of power, autonomy, and rights of people in the organization. Similarly, Nandi and Kumar (2016) described an ERP implementation as a type of organizational innovation. Nandi and Kumar (2016) defined organizational innovation as the initiation, acceptance, and implementation of new processes, products, or services for the first time within an organizational setting to change the organizational processes, to achieve better organizational outcomes. Based on this definition, an ERP implementation is a corporate innovation because it involves setting up a new integrated information system in the organization. This significant organizational change results in changing existing business processes, strategy, organizational culture, management, human resources, and organizational structure.

Garg and Agarwal (2014) highlighted that the significant problems in implementing an ERP are related to people, organization, and change management rather than technical conditions. According to Usmanij et al. (2013), eight of the top ten Critical Success Factors associated with an ERP implementation are related to human factors: senior management support, project team competence, interdepartmental cooperation, clear goals and objectives, project management, interdepartmental communication, management of expectations, and careful package selection. Usmanij et al. (2013) highlighted that ERP implementations are

affected by the complexity of the relationships between the stakeholders and the interaction between them.

Stanciu and Tinca (2013) highlighted that ERP implementation success is positively related to a culture of development, collaboration, participative decision-making, power sharing, and tolerance for risk and conflicts. However, Stanciu and Tinca (2013) noted that due to the senior leader's autocratic leadership style, the employee did not perceive that the top management considered their opinions. Therefore, the employees opposed the change because they felt disconnected from the project, with little incentive to contribute. Coelho, Cunha, and Meirelles (2016) highlighted that government organizations are more risk-averse, complex, and have fragmented power structures which lead to leadership difficulties. Spoehr (2015) stressed that Army leaders do not fully understand their processes and the costs of these procedures. Since governmental organizations tend to be more complicated, this complexity affects the identification of processes. Coelho et al. (2016) posited that the ERP solutions successfully used in business might not apply to the government sector due to these unique characteristics. Coelho et al. (2016) noted that ERP projects in the public area require greater teamwork than ERP implementations in the commercial sector.

Li et al. (2016) noted that leadership and top management support are the most crucial success factors in an ERP implementation. Li et al. (2016) based this proposition on several factors. First, the ERP implementation requires organizational change and the facilitation and marketing of the project to the user. Second, the leader's vision, attitude, and behavior influence the employee's perceptions of the benefits of the ERP implementation. Third, the leader aligns the business strategy with the information system strategy to improve organizational outcomes (Li et al., 2016). Thus, leader behavior contributes to the challenges of implementing the ERP

solution into the organization. The literature review revealed a relationship between leadership and an ERP implementation and specific leader behaviors that are instrumental in an ERP implementation.

According to Ali and Miller (2017), Coeurderoy et al. (2014), and Abbasi et al. (2014), the most critical behaviors that support an ERP implementation are those that support management commitment, business process re-engineering, and change management. Xiang, Archer, and Detlor (2014) noted that an effective culture for organizational change should be created to increase the likelihood of success in an ERP implementation. Concerning the employee level of change management, they stated that it was essential to deal effectively with employee resistance, through improved communication, employee empowerment, or practical training. The stakeholder level of change management requires adequate communication with stakeholders to solicit their opinions on business process re-engineering projects. Additionally, Basu and Bhola (2016) cited management support, employee empowerment, communications and strategy as critical in an ERP implementation. The leader actions examined in this review are management commitment, change management, communications, employee empowerment, and strategy.

Leader behavior and management commitment. Spoehr (2015) noted that to drive performance and process improvements across the Army enterprise continuously, the new operating framework will only succeed with the continued and complete support of the Army leader. Management support and commitment are the most critical factors in a successful ERP implementation (Saade & Nijher, 2016; Garg & Agarwal, 2014; Pishdad & Haider, 2013). According to Garg and Khurana (2017), ERP implementation should not depend on the project managers and consultants, but incorporate the support of the top management. Top management

commitment and senior executive involvement can improve internal communication and create more effective and proper collaboration and integration. This management commitment alleviates organizational risk during an ERP implementation. Garg and Agarwal (2014) concluded that top management support is defined by providing valuable resources and controlling the whole implementing process.

Apart from providing the resources, the literature defined management commitment as giving a clear vision and strategy for the ERP implementation that makes the leadership of the project visible and effective. Garg and Chauhan (2015) recommended that the leader establish a clear vision, goal and business plan for the ERP implementation. The research revealed that if an organization does not have a defined vision and business plan, there is a high probability of an ERP failure (Garg & Chauhan, 2015).

Additionally, top management should spend significant amounts of time serving on steering or executive committees during the ERP implementation so that it can boost the employees' confidence in the whole project. Shao et al. (2016) found that leaders who successfully implemented an ERP took charge of the specific implementation process, and demonstrated strong execution skills by monitoring and controlling the implementation schedule, focusing on business process re-engineering, reducing resistance to the project and orchestrating training to promote knowledge transfer to the employees. These actions align well with the transactional leadership style and task-oriented leadership behaviors.

Almajali et al. (2016) found that top management must share decisions with employees and provide funding for worker training. According to Almajali et al. (2016), user training is essential in an ERP implementation. Education and training provide management and employees with the logic and overall concepts of the ERP systems. Leaders should train the

users through all stages of the ERP implementation, and provide additional training for new employees and those who take job rotations. Garg and Garg (2014) highlighted that ERP training saves the organization time and money, develops a confident workforce, and creates a clear understanding of the ERP system. Preparation not only familiarizes the user with the ERP system but it helps in the organizational change process. Furthermore, getting people educated and trained and keeping them informed throughout the implementation process is critical to achieving the benefits of an ERP system.

In regards to Yukl's (2012) hierarchical taxonomy of leadership behaviors, the leader behaviors that demonstrated management commitment were predominately task-oriented; however, there were some relationship-oriented and change-oriented behaviors. The task-oriented behaviors were clarifying, planning, and monitoring operations. The relationship-oriented behaviors were supporting and developing. The change-oriented behavior was envisioning.

Leader behavior and change management. Revenaugh and Muretta (2013) noted that ERP implementations are putting renewed interest in change management. Pishdad and Haider (2013) highlighted that an ERP implementation changes how an organization operates and may initiate changes in the organizational culture. Elkhani et al. (2014) noted the leadership must guide the corporate culture because the culture plays an essential role in the ERP implementation. Revenaugh and Muretta (2013) stated that the business process redesign inherent in ERP implementations require significant technical, organizational, and cultural change. Implementing an ERP system needs an organization to re-engineer their business processes and execute new business practices. Shatat (2015) noted that re-engineering a company's business process is a difficult task and may cause a system failure. Therefore,

Pishdad and Haider (2013) indicated if a leader does not consider change management strategies and adequately prepare the organization for the changes, it is inevitable the ERP implementation will fail.

Bin Taher, Krotov, and Silva (2015) defined change management as a process of communicating and enforcing a program consisting of clearly defined, time-framed actions needed to take an organization from an undesirable state A to a desirable state B, and identify and measure both states. Daft (2016) noted that changing people and culture is typically more difficult than changing any other aspect of the company. Leaders often underestimate the difficulty of changing the culture and fail to appreciate that it takes a determined, consciously planned effort over an extended period. Therefore, Bin Taher et al. (2015) highlighted that leadership is a Critical Success Factor in change management because leadership is essential for formulating the vision and enforcing the change program. Additionally, leadership fosters an organizational commitment to the initiative and availability of resources. Leadership can also have a positive impact on technology implementation by eliminating or reducing the obstacles to change. Similarly, Daft (2016) noted the lack of top management support is one of the most frequent causes of implementation failure.

Schniederjans and Yadav (2013) highlighted that within an ERP implementation, change management not only involves changing current business processes and ensuring user training, but also incorporates changing the overall culture of the organization. While management may be able to impact and mitigate potential problems associated with a risk-averse philosophy or culture not adaptive to change, a mismatch in values and implementation can lead to a failing ERP solution.

Althonayan and Althonayan (2017) noted that ERP implementations in the public sector often fail because of stiff resistance from the employee. In an interview of five project managers, Althonayan and Althonayan (2017) highlighted that four managers stated that the older users preferred to work with the legacy system, rather than waste time learning how to work with the new ERP system. The older employees considered the ERP system complex compared to the legacy system. Four out of the five managers identified resistance to change as the major problem that they faced during the ERP implementation phase.

Spector (2013) highlighted that announcing the need for change, proclaiming new goals or presenting a rational argument for how the changes will improve the performance will not motivate behavioral change. Spector (2013) noted that creating dissatisfaction with the status quo is the first step in implementing change. Second, members of the organization must move from one set of behaviors to another, and these new behaviors must become permanent for the desired period. Finally, the final stage in implementing change is to institutionalize the different pattern of actions into a new status quo with a new pay system or a new organizational structure.

In regards to Yukl's (2012) hierarchical taxonomy of leadership behaviors, the leader behaviors that demonstrated change management were mainly change-oriented. However, there were some relationship-oriented behavior and task-oriented behavior. The change-oriented behaviors were advocating change, envisioning change, encouraging innovation, and facilitating collective learning. The relationship-oriented behaviors were supporting and empowering. The task-oriented behaviors were clarifying and monitoring.

Leader behavior and communications. Muthuveloo et al. (2017) noted that leaders lead through effective communication. Effective communication is significant because Garg and Chauhan (2015) highlighted that poor communication is one of the top contributors to ERP

implementation failures. According to Muthuveloo et al. (2017), excellent communication behavior enables the leader to foster and create the understanding and trust necessary to encourage others to follow a leader. Without effective communication, a manager accomplishes little, and they are not an effective leader. Muthuveloo et al. (2017) highlighted that the behavioral model of leadership provides a general role for communication in leadership.

Garg and Garg (2014) and Gavidia (2016) noted that enterprise-wide communication is one of the most significant factors for a successful ERP implementation. Garg and Garg (2014) recommended that leaders have reliable and effective communication throughout the ERP implementation. Open and honest communication across the organization is critical to satisfy the information needs of the company employees and to prevent unfounded rumors. Bintoro, Simatupang, Putro, and Hermawan (2015) highlighted that interdepartmental communication addresses the rationale for the ERP implementation. Bintoro et al. (2015) recommended this communication include the details of the business process management, a demonstration of the ERP software modules, the change management strategies and tactics, and the points of contact for the ERP implementation. Additionally, Bintoro et al. (2015) noted that interdepartmental cooperation is essential for understanding and approving the ERP implementation and sharing information between the project team and the organization regarding the results and the goals during each stage of the ERP implementation.

Toves, Graf, and Gould (2016) highlighted that the significant role of information is to reduce uncertainty due to imperfect knowledge of reality. Therefore, consistent and reliable communication from top management to the frontline workforce is essential. Toves et al. (2016) noted that unreliable communication leads to a long-term implementation process because employee uncertainty creates instability problems in the organization that leads to low morale,

low commitment, and resistance to change. Bin Taher et al. (2015) noted that communication is a crucial component for managing change in the public sector. According to Bin Taher et al. (2015), communication helps to educate employees about the purpose of change and ensures their commitment. Bin Taher et al. (2015) emphasized that communication is a vehicle to reconcile the difference of opinions regarding the primary goals and objectives of change among functional units in an organization

Hwang and Min (2015) noted that a company's preference for open communication enables information sharing and is instrumental in a successful ERP implementation. Shatat (2015) highlighted that information sharing is not only within the organization, but that information sharing extends the organizations boundaries to other activities in the enterprise. Therefore, information sharing enhances business performance and helps achieve a competitive advantage and improves long-term profitability. Nandi and Kumar (2016) highlighted that organizations with information sharing and interaction within groups are more likely to work through difficulties associated with an ERP implementation. They noted that information sharing within the organization about change management, and the ERP implementation process creates better organizational outcomes. The authors posited that organizations with open communication are more likely to incorporate the ERP into their work processes rather than an organization without open communications.

In regards to Yukl's (2012) hierarchical taxonomy of leadership behaviors, the leader behaviors that demonstrated communication were mostly relationship-oriented behaviors. There were also task-oriented behavior, change-oriented behavior, and external. The relationship-oriented behaviors were supporting, developing, and empowering. The task-oriented behaviors

were clarifying and monitoring. The change-oriented behavior was encouraging, and the external behavior was representing.

Leader behavior and employee empowerment. Spoehr (2015) noted that Army leaders must empower their subordinates with authority and training to improve the business processes of the Army. Pishdad and Haider (2013) posited that subordinates must realize that they are not a passive user of the ERP system, but have a more significant role in an ERP implementation. Therefore, user involvement is one of the most significant factors in an ERP implementation project. Garg and Garg (2014) recommended that the user should be involved during the entire ERP implementation to reduce user resistance and align employee acceptance with new business processes. Consequently, when ERP users believe leadership hears their voice, they are more confident the system is beneficial and are more open to accepting it.

Narimani, Tabaeian, Khanjani, and Soltani (2014) noted that organizational environments that support organizational changes and employees' engagement directly influence the quality of the ERP's information systems. Narimani et al. (2014) noted that implementing an ERP enterprise systems affects the behavior of both managers and staff members; however, leaders and staff members take these behavioral dynamics in ERP implementation too lightly. ERP systems not only transform an information system environment but also affect the business processes and employee behaviors at a corporate-wide level. Therefore, it is desirable for ERP system success variables to include the measurements reflecting information system quality, the effectiveness of the business process, and the employee behaviors.

Abbasi et al. (2014) found that an ERP implementation improved the relationship between organizational departments such as production, sales, distribution, and management. The communication between departments increases the knowledge of employees in activities in

other organizational units. Abbasi et al. (2014) suggested that this increased knowledge empowers employees. The lack of employee involvement at all company levels, as well as inadequate training and education, causes many users to become frustrated with the system due to its complexity and significant learning curve. Frequently, employees at lower levels of the organization are not as involved as they should be, and they lack encouragement from top management to express their concerns or suggestions to address functional issues (Beheshti, Blaylock, Henderson, & Lollar, 2014). The ERP implementation is impacted negatively because the employee reverts to the old way of doing things or creates make-shift workarounds that circumvent the ERP system.

Although considerable research has highlighted the importance of empowering employees, not all existing studies have derived the same results. Alhirz and Sajeev (2015) emphasized that leaders in organizations in Saudi Arabia limited employee empowerment because they were concerned about losing their control over employees after implementing an ERP system. Wong Humborstad, Nerstad, and Dysvik (2014) highlighted that empowering employees may increase resistance and create task uncertainty. These studies posited that enabling employees may not always be beneficial and that the additional responsibilities and autonomy from empowerment programs such as job enrichment and skill enhancement can be seen as burdens by some employees and impede employee and organizational performance.

In regards to Yukl's (2012) hierarchical taxonomy of leadership behaviors, the leader behaviors that demonstrated employee empowerment was predominately relationship-oriented. However, change-oriented behavior also existed. The relationship-oriented behavior included empowering, developing, supporting and recognizing. Change-oriented behaviors were encouraging innovation and facilitating collective learning.

Leader behavior and strategy. Spoehr (2015) posited that outstanding organizational performance starts with a good strategy. Before making a substantial investment into an ERP plan, Hwang and Min (2015) highlighted that the organization should investigate whether an ERP implementation is an excellent strategic fit for its group and business strategy.

Katerattanakul, Lee, and Hong (2014) noted there is a positive relationship between the success of the ERP system and the alignment of the ERP implementation and the company's business strategy.

Pollard and Morales (2015) defined business strategy and information technology as the “degree to which the information technologies mission, objectives, and plans support and are supported by the business mission, objectives, and plans” (p. 30). Concerning a successful ERP implementation, Revenaugh and Muretta (2013) noted there must be a substantial alignment between the business strategy, information technology strategies, and the company's organizational processes. Revenaugh and Muretta (2013) emphasized that before the organization implements an ERP software, the firm should define its corporate strategy and objectives. Once the organization has a clear company strategy, Revenaugh and Muretta (2013) noted the company needs to determine the “to be” business processes that will enable the corporate strategy. Finally, the organization can begin designing, configuring, and testing its ERP system to ensure the organizational strategy and objectives align with the ERP system.

Pollard and Morales (2015) noted that in a study of 160 small firms in Midwest USA, a small firm's ability to develop aligned information technology capabilities with its business strategy would affect the company's ability to use strategic flexibility to anticipate proactively and react to needed changes and improve the company's performance. Therefore, the alignment allows an organization to make the most of its information technology investments and increase

profitability. Similarly, Basu and Bhola (2016) posited that an ERP implementation positively affects firm performance when enterprise information system implementation interacts directly with the quality improvement systems.

In regards to Yukl's (2012) hierarchical taxonomy of leadership behaviors, the leader behaviors that demonstrated the alignment of the strategy was mostly task-oriented. However, change-oriented behavior also existed. The task-oriented behaviors were clarifying, planning, and problem-solving. The change-oriented behaviors were envisioning and advocating.

Potential themes and perceptions. This section explored the literature-based description of the potential themes and perceptions examined in this study. Reitz (2017) defined the potential themes in a review as the recurring ideas found in the literature. Similarly, Creswell and Poth (2018) noted that themes are broad units of information that consist of several categories aggregated to form a common idea. Ryan and Bernard (2003) posited a four-step process for identifying themes during the review of literature for a research study. The first step is to discover the themes and subthemes. Ryan and Bernard (2003) highlighted that repetition was the easiest way to identify issues. Therefore, the researcher looks for keywords and phrases that the authors repeated in multiple sources of literature. The more repetitive the word or phrase is in the research, the more likely the concept is a theme. The second step is to determine which topics are most critical to the study and sorting the ideas down to a manageable few. The third step is to establish a hierarchy of items to be examined in the study. According to Reitz (2017), the researcher based the hierarchy of themes on the order that the issues were explored, in order of importance, or in an order that is driven by the study. The last step of the process is to link the themes to the theoretical models of the study (Ryan & Bernard, 2003).

Potential themes. This review developed potential themes that addressed leader behavior in a successful implementation of an ERP at an army installation in the Mid-Atlantic region. A successful ERP implementation is mainly dependent on the leader's behavior (Garg & Chauhan 2015). Similarly, Usmanij et al. (2013) noted that implementation challenges related more to behavioral and management issues than to technical difficulties. The central theme of this study was that the behavioral approach to leadership is essential to the study of leader behavior and ERP implementation. Yukl (2012) incorporated behavior into the four meta-categories of task-oriented, relationship-oriented, change-oriented and external. Additionally, Yukl (2012) identified 15 leader behaviors associated with these four meta-categories.

The second theme in this review of a successful ERP implementation was leadership and management commitment. Li et al. (2016) noted that leadership and top management support are the most crucial success factors in an ERP implementation. Garg and Agarwal (2014) concluded that top management support is defined by providing valuable resources and controlling the whole implementing process. Additionally, the literature defined management commitment as giving a clear vision, goal, and plan for the ERP implementation. During an ERP implementation, the primary inter-relationship between management commitment and leader behavior was in task-oriented behaviors.

A third potential theme in this review was leader behavior and change management. Pishdad and Haider (2013) highlighted that an ERP implementation changes how an organization operates and may initiate changes in the organizational culture. Revenaugh and Muretta (2013) stated that the business process redesign inherent in ERP implementations required significant technical, organizational and cultural change. Similarly, Althonayan and Althonayan (2017) noted that ERP implementations in the public sector often fail because of stiff resistance from the

employee. Change management begins by the leader creating dissatisfaction with the status quo. Then, the leader must move the members of the organization from one set of behaviors to another. Finally, the leader institutionalizes the new pattern of behavior into the new status quo. The primary inter-relationship between change management and leader behavior during an ERP implementation was in change-oriented behaviors.

A fourth potential theme in this review was leader behavior and communications. Muthuveloo et al. (2017) noted that leaders lead through effective communication. Likewise, Garg and Chauhan (2015) highlighted that poor communication is one of the top contributors to ERP implementation failures. Open communications and information sharing extend the boundaries of the organization and are more likely to incorporate an ERP into the organization's work processes. The primary inter-relationship between communications and leader behavior during an ERP implementation was in relationship-oriented behaviors.

A fifth potential theme in this review was leader behavior and employee empowerment. Spoehr (2015) noted that Army leaders must empower their subordinates with authority and training to improve the business processes of the Army. Therefore, subordinates play an active role in an ERP implementation. Employee empowerment reduces user resistance and aligns employee acceptance with the new business processes in the ERP implementation. The primary inter-relationship between employee empowerment and leader behavior during an ERP implementation was in relationship-oriented behaviors.

A sixth potential theme in this review was leader behavior and strategy. Pollard and Morales (2015) defined business strategy and information technology as the measure of alignment between the objectives of information technology with the business objectives of an organization. Katerattanakul et al. (2014) noted there is a positive relationship between the

success of the ERP system and the alignment of the ERP implementation and the company's business strategy. Therefore, the primary inter-relationship between strategy and leader behavior during an ERP implementation was in task-oriented behaviors.

Perceptions. Reitz (2017) noted that perceptions are different than potential themes because perceptions are more subjective than themes. Within qualitative research, both the researcher and the participants bring their perspective to the research study. These perspectives refer to the perceptions of the researcher and the participants and have an impact on the outcome of the investigation. Creswell and Poth (2018) indicated that the researcher must keep their focus on learning the meaning of the participants' perceptions about the problem, or issue. Therefore, Creswell and Poth (2018) posited that the potential themes developed in a qualitative study should reflect the multiple perceptions of the participants in the research and not the attitudes of the researcher.

Transition and Summary of Section 1

Li et al. (2016) noted that only 35 percent of companies in the United States completed their ERP implementation on time and within budget and the incidences of underperformance and failure are as high as 90 percent. The purpose of this qualitative study was to increase the empirical knowledge of a military leader's behaviors in an organization required to implement, maintain, and extend an ERP solution. This study intended to identify and communicate essential leader behaviors that support a successful ERP implementation in a military organization. From the literature review, the leader actions supporting ERP implementation are management commitment, change management, communications, employee empowerment, and linkage with strategy. Concerning behavioral theory, the leader behaviors supporting an ERP implementation are task-oriented, relationship-oriented, change-oriented and external. For

example, for a leader to demonstrate management commitment in an ERP implementation, the researcher found that the leader should articulate a clear vision (change-oriented) allocate resources among the different activities (task-oriented) and provide relevant training (relations-oriented).

This study is an examination of the behaviors to be used by military leaders to implement an ERP successfully in an Army organization. As the foundation of the research, this section provided essential information about the problem to be addressed and the purpose to be achieved. The study was a qualitative study with a case study design. Section 1 discussed the definition of key terms, assumptions, limitations and the significance of the study. Finally, this section presented an exhaustive review of professional and scholarly writings along with prospective themes to be examined in the study. The next section discusses the research project in regards to the research design and method.

Section 2: The Project

This study examined how leaders of a military organization utilized specific leader behaviors to complete an ERP implementation in an Army organization successfully. To explore this research question, the researcher interviewed leaders in a military organization who have completed an ERP implementation and reviewed documents. This study utilized the qualitative method with a case study design. This section defines the research project specifics by providing the overall purpose to be achieved by the research and the role of the researcher and the study participants. Additionally, this section describes the research method and design, population and sampling, and data collection procedures for the study. Finally, this section thoroughly reviews the data analysis techniques and the process for establishing the reliability and validity of the study.

Purpose Statement

The purpose of this qualitative study was to increase the empirical knowledge by expanding on the understanding behind the unsuccessful ERP implementations at army installations. The researcher explored this significant problem through an in-depth study of leadership behaviors and their relationship with ERP implementations at an Army installation in the Mid-Atlantic region. Identifying these specific leader behaviors will better equip military and civilian leaders in addressing the problem of unsuccessful ERP implementations.

To accomplish the purpose of this study, the researcher reviewed the associated professional and scholarly literature to gain a current understanding of leader behavior in a successful ERP implementation. Additionally, the researcher examined ten leaders that have completed an ERP implementation at an army installation. This examination included personal

interviews and the review of relevant documents. Stake (2010) highlighted that interviewing and examining documents are the most common methods of qualitative research.

Role of Researcher

In a qualitative study, the role of the researcher is a data collection instrument (Creswell & Poth, 2018; Stake, 2010; Yin, 2014). Stake (2010) highlighted that the researcher observes action and context; therefore, the researcher is playing an actual role in the study by using their own experiences in making interpretations of the data. For this study, the researcher collected data through participant interviews. Additionally, the researcher supplemented the data collection with follow-up discussions, literature reviews, and relevant data.

Participants

Yin (2014) described the participant as the subject of the study that provides critical information and interpretations about the case and suggested other sources of evidence that the researcher could check. The participants in this study were senior leaders in a military organization that have completed an ERP implementation and were willing to participate in this study. Initially, the researcher contacted the participants by email and described the requirements of the study, as well as, attached a consent form to the email. The participants completed the consent form and scheduled an interview with the researcher. The discussion consisted of open-ended questions designed to investigate the participants' experience in their ERP implementation.

Furthermore, before the conversation began, the researcher discussed the background and the requirements of the study. The purpose of this technique was to establish a working relationship with the participants. Additionally, the researcher specified that the participants could withdraw from the study at any time. The researcher recorded and transcribed the

interviews. Each participant permitted the recording of the discussions and received a copy of the transcript for their review and approval.

A qualitative research case study examines a contemporary phenomenon in its real-world context and concerns human affairs. Yin (2014) noted that protecting participants during the case study research is essential. Therefore, guarding the privacy and confidentiality of the participants was crucial, and the researcher protected their confidentiality in multiple ways. First, all of the electronic files related to the participants were stored only on the researcher's computer, and the machine is password protected. Second, any hard copy documents, such as interview transcripts, are stored in a locked file drawer, and only the researcher had access to the drawer. Third, codes were used to identify the participants and their organization to preserve the privacy and confidentiality of the participants. Finally, the researcher will destroy all records from the case study research three years after the researcher completes the study. Yin (2014) highlighted that it is essential that the researcher does not put the participants in an awkward position, such as being placed on a roster to participate in future studies. Therefore, the researcher will not target these participants for future studies.

Research Method and Design

Ottrey and Porter (2016) defined research as an investigation undertaken to gain knowledge and understanding. With regards to research approach, Creswell and Poth (2018) described research as an eight-step process: acknowledge assumptions and identify interpretive lens, determine research problem, establish research questions, collect data, analyze data, present results, discuss findings, and validate findings. Similarly, Yin (2014) described a six-step process: plan, design, prepare, collect, analyze, and share. Although the steps in the two research processes are different, Creswell and Poth (2018) and Yin (2014) highlighted the importance of

the research method and design for answering the research question. Consequently, Sohel and Quader (2017) emphasized that the choice of the research method is critical because it determines the accuracy and reliability of the study.

For this study, the researcher utilized the qualitative research method and the case study design. The researcher based this decision on the nature of the study and the current research practices. The following section explains the rationale for selecting the qualitative method and case study design.

Discussion of the method. The researcher selected the qualitative research method for this study of leadership behaviors and their relationship with ERP implementation at an Army installation in the mid-Atlantic region. The investigator chose this technique because the research needs a detailed understanding of the issue. Creswell and Poth (2018) noted that this detail could only be established by talking directly with people in their workplace and allowing them to tell their experience unfettered by what the researcher may find in the literature. According to Stake (2010), in qualitative research, the researcher plays a personal role seeking an experiential understanding, and in the quantitative method, the researcher plays an impersonal role seeking an objective understanding.

Additionally, this study consisted of open-ended questions instead of numbers and statistics. Therefore, this distinction lends itself to qualitative research instead of a quantitative approach. Similarly, Creswell and Poth (2018) highlighted that qualitative research explores issues through the use of open-ended questions in direct interactions, observation through passive communications, and from other relevant documents; whereas, Creswell and Creswell (2018) noted that quantitative research collects data on instruments that yield statistical

information. Finally, Yin (2014) indicated that mixed methods combine the quantitative and qualitative approach; consequently, the researcher did not select the mixed method approach.

Discussion of the design. Since research must follow an acceptable pattern, Mulder and Whiteley (2007) noted that the purpose of research design is to provide a logical sequence that connects the field data to the study's initial research question and ultimately to its conclusions. Similarly, Yin (2014, p. 28) defined research design as a “logical plan for getting from here to there, where *here* may be defined as the initial set of questions to be answered, and *there* is some set of conclusions (answers) about the questions.” In the qualitative approach, there are various research design methods. Creswell and Poth (2018) identified five strategies for qualitative research design, which are narrative research, phenomenological research, grounded theory research, ethnographic research, and case study research.

The most appropriate design for this study was the case study approach. Creswell and Poth (2018) viewed case study research as a research methodology and defined it as the study of a case within a real-life, contemporary context or setting. Similarly, Yin (2014) noted that case study research investigates a present-day phenomenon in its real-world context, mainly when the boundaries between the background and the event are not evident. Accordingly, Creswell and Poth (2018) indicated that the case might be an individual, a small group, an organization, or a partnership. However, the case may also be a community, a relationship, a decision process or a particular project. Yin (2014) showed that case study research is an all-encompassing research method because it covers the logic of design, data collection, and approaches to data analysis. Yin (2014) noted that three conditions determine the selection of the case study design: the type of research question presented (how or why?), the need for the researcher to control the behavioral events of the participants (yes or no), and focus on contemporary happenings as

opposed to historical events. This study presented research questions regarding how leadership behaviors affect the successful implementation of ERP, it does not seek to control the action of the study participants, and the study focuses on contemporary issues. Therefore, the case study approach was an appropriate qualitative method for this study.

Yin (2014) highlighted that the study's research design is a blueprint for dealing with four problems; what question to study, what data are relevant, what data to collect, and how to analyze the results. There are five components in the research design of a case study approach. Yin (2014) defined these five components as a study's questions, its propositions, its unit of analysis, the link between the data and the propositions, and the criteria for analyzing the results. Since this study employed the case study design, the researcher followed Yin's (2014) design blueprint. The researcher examined the research questions and propositions in the following paragraphs; however, the researcher discusses the unit of analysis (population and sampling), logic linking the data to the proposition (data collection) and criteria for analyzing the results (data analysis) in later divisions of Section 2.

The first component of Yin's research design is the research question. The research questions were:

1. What are the specific leadership behaviors required to successfully complete an ERP implementation at an army installation within the Mid-Atlantic region?
2. How does the leader's education and experience contribute to a successful ERP implementation?
3. How does the leader's leadership style influence a successful ERP implementation?

The research questions were a driving force to guide the research design and the literature review. First, the literature revealed that there was a relationship between leader behavior and

organizational performance (Tognazzo et al., 2017; Yukl, 2013; Zeb et al., 2018). Second, the literature revealed there was an essential relationship between leader behavior and a successful ERP implementation (Shao et al., 2016). Therefore, it was vital that the research questions for this study address the association between leader behaviors and the organizational outcome of a successful ERP implementation.

The second component of Yin's research design is the proposition. Yin (2014) noted that the proposition directs the study in the right direction and reveals issues that should be examined within the scope of the study. For this study, two proposition led to the design of the case study. First, the literature revealed that the difficulties related to an ERP implementation are associated with organizational change (Stanciu & Tinca, 2013). Therefore, the study examined change management in the literature review. Second, the researcher found in the literature review that management support and commitment are the most critical factors in a successful ERP implementation (Saade & Nijher, 2016; Garg & Agarwal, 2014; Pishdad & Haider, 2013). Since leader behavior has an impact on the success of an ERP implementation, the researcher selected only leaders who have completed an ERP implementation in a military organization.

Summary of research method and design. For this study, the researcher utilized the qualitative research method and the case study design. The researcher based this decision on the nature of the research and the current research practices. The case study design was based on Yin's blueprint and consisted of the study's research questions, its propositions, its unit of analysis, the link between the data and the propositions, and the criteria for analyzing the results.

Population and Sampling

Berg and Karlsen (2016) noted that the two types of sampling are probability and nonprobability. Berg and Karlsen (2016) highlighted that nonprobabilistic sampling, also called

purposeful sampling, was the most appropriate sampling strategy for a qualitative study. The researcher bases the sampling process on the assumption that they wanted to discover, understand and gain insight. Furthermore, the researcher selects the case that provides the most knowledge about the research questions. Similarly, Creswell and Poth (2018) posited that purposeful sampling strategy allows the researcher to choose the individuals and sites for the case study that can decisively inform an understanding of the research problem in the study.

Discussion of population. The Army uses ERP systems throughout all levels of its command structure. Currently, the Army has four ERP systems: General Funds Enterprise Business Systems (GFEBS), Logistics Modernization Program (LMP), Global Combat Support System-Army (GCSS-A), and Army Enterprise System Integration Program (AESIP). The Army completed the initial rollout of its ERP implementation seven years ago. However, the Army expects to extend its ERP solution by implementing additional capabilities in the management of its supply chains to specific Army organizations. Program Executive Office Enterprise Integration Office (PEO EIS; 2017) noted there are over 220,000 users of the Army ERP systems at multiple levels of command and hundreds of locations around the world. Therefore, thousands of leaders completed an ERP implementation across the various levels of the Army Command structure.

Discussion of sampling. Garg and Garg (2014) posited that organizational leadership should define the business plan and vision for the ERP project and align the ERP investment and change management with the strategic alignment of the organization. Therefore, for this study, the case focused on an Army organization in the Mid-Atlantic Region where senior Army leaders have completed an ERP implementation. Senior leaders in the organization were selected

because they defined the implementation plan and established the vision for the ERP implementation.

Additionally, the top leaders aligned the ERP investment and change management process with the strategic objectives of the organization. In this case, the term “senior leader” refers to military officers in the rank of Lieutenant Colonel and civilian leaders in the grade of GS-13 to GS-15. Additionally, these leaders will have the title of Program Manager, Product Manager, Director, Division Chief, Branch Chief, Deputy Commander, or Commander.

This case study was a single case study design. According to Creswell and Poth (2018), a single case meets the requirement for a valid qualitative case study. Yin (2014) noted the researcher selects a single case study if the case was unusual or revelatory. This case study is unique because the senior civilian leaders have managed the ERP implementation within the military organization from the beginning of the implementation to the end. Additionally, the senior military leader in the organization has led the organization and the ERP implementation for the last two years. Within the military structure, senior military officers transfer to different assignments every two to three years. However, civilian leaders are not required to move and provide continuity in the military organization. Therefore, the participants for this study were purposely selected by the researcher because of the participants’ experience, continuity in the organization, and knowledge of the ERP implementation.

Creswell and Poth (2018) highlighted that a purposeful sampling strategy allows the researcher to choose the individuals and sites for the case study that can decisively inform an understanding of the research questions in the study. Since the researcher focused the study on leadership behaviors in an Army organization, the sample size for this study included the number of participants needed to reach data saturation. Boddy (2016) noted that data saturation was a

useful tool for determining sample size in a qualitative study. Boddy (2016) defined data saturation as the point that there is no new information from the completion of additional interviews and highlighted that data saturation started to become evident at six in-depth interviews. Creswell and Poth (2018) noted that saturation might involve 20 interviews. Therefore, the researcher used data saturation to determine the sample size for this study.

Summary of population and sampling. According to PEOEIS (2017), there are over 220,000 users of the Army ERP systems across all of the commands within the U.S. Army. For this study, the researcher selected a single case within the Mid-Atlantic Region where senior Army leaders had completed an ERP implementation. The researcher purposely chose the participants in this case study because they managed an ERP implementation within the military organization from the beginning of the implementation to the end. The continuity among the leadership highlights the uniqueness of the participants and this single case. The sample size for this study included the number of participants needed to reach data saturation.

Data Collection

According to Yin (2014), case study research is a standard method in business examination and contributes to our knowledge of an individual, group, organization, and related phenomena. A case study allows the researcher to focus on a case and retain a holistic and real-world perspective in studying individual behavior, small group behavior, organizational, or managerial processes (Yin, 2014). Among the general categories of data collection, Creswell and Poth (2018) highlighted interviews, observations, documents, and audiovisual materials. Similarly, Yin (2014) noted that the six sources of research data in a case study are documentation, archival records, interviews, direct observation, participant-observation, and physical artifacts.

Additionally, Yin (2014) posited that the four principles of data collection are assessing multiple sources of evidence, creating a case study database, maintaining a chain of evidence, and exercising care when using data from electronic sources. By following the four data collection principles, the researcher maximizes these sources of data. This section examined the specific details of the study's data collection in the areas of instruments, data collection techniques, and data organization techniques.

Instruments. In a qualitative study, the role of the researcher is a data collection instrument (Creswell & Poth, 2018; Stake, 2010; Yin, 2014). The researcher was not a member of the studied organization. Creswell and Poth (2018) cautioned researchers about analyzing their organization or workplace because it raises questions about whether the researcher collects useful data when the act of data collection may introduce a power imbalance between the researcher and the participants. Therefore, for this study, the researcher was the data collection instrument. The sources of data examined by the researcher were personal interviews, documents, and observations. The researcher examined these resources from the perspective of ten senior leaders from a military organization on an Army installation in the Mid-Atlantic region.

Data collection techniques. The first data collection technique used in this research were the participants' interviews. Yin (2014) indicated that the interview is one of the most important sources of case study evidence because case study research focuses on contemporary events and does not require control of behavioral events. This study addressed the leader behavior in an ERP implementation; therefore, interviews were conducted to collect data for the research.

The interview process was a five-step procedure. First, the researcher received approval for the study from the Liberty University Institutional Review Board and the Army Human Resource Protection Office. Second, the researcher identified senior leaders who had participated in an ERP implementation at an Army Installation. Third, the potential participants received an email describing the study and requesting their participation (Appendix A). Fourth, the researcher received a sign consent form from each participant stating the participant was willing to contribute to the study before the researcher conducted the face-to-face interviews (Appendix B). Fifth, the researcher conducted the interviews.

Yin (2014) identified three types of interviews: shorter case study interviews, prolonged case study interviews, and survey interviews. For this study, the researcher utilized shorter case study interviews. Specifically, the researcher assumed a conversational manner, remained open-ended, conducted over a shorter period, and followed a case study protocol. The shorter interviews used open-ended questions which were developed to examine the research questions. The researcher developed the interview questions based on the works of many researchers and scholars discussed during the literature review (Garg & Khurana, 2017; Peng & Gala, 2014; Nandi & Kumar, 2016; Garg & Agarwal, 2014; Yukl, 2013; Stanciu & Tinca, 2013; Li et al., 2016; Abbasi et al., 2014; Ali & Miller, 2017; Saade & Nijher, 2016; Yukl, 2012; Revenaugh & Muretta, 2013; Garg & Chauhan, 2015; Spoehr, 2015; Katerattanakul et al., 2014).

The interview questions were made up of seven open-ended questions designed to capture the participants' experience associated with an ERP implementation at an Army installation (Appendix C). Creswell and Poth (2018) noted that five to seven open-ended questions were about the right number of questions for an interview. Similarly, Stake (2010) indicated that eight questions were about right for an hour-long interview. The researcher

conducted the meetings face-to-face with the participants. The conversations were recorded for accuracy and transcribed verbatim for approval from the participants and further review by the researcher. The researcher gave each participant a copy of their interview transcript.

Creswell and Poth (2018) recommended developing an interview guide to assist the researcher in executing the interviews, aligning the interviews with the study, and recording the information provided by the participants. For this study, the researcher's interview guide began by thanking the participants for being willing to contribute to the research and explaining the purpose of the study (Appendix D). The purpose of this study was to explore leadership behaviors and their relationship with an ERP implementation at an Army installation in the Mid-Atlantic region.

The second component of the interview guide was the interview questions. The interview questions were designed to meet the purpose of the study and address the study's research questions (Appendix C). Since the research questions were addressing a successful ERP implementation, question one examined how the leader defined a successful ERP implementation. Question two discussed the key strategies and resources the participants used to complete the ERP implementation at an army installation. This question is related to the leadership style the participants used during the different phases of the ERP implementation. Question three examined the participant's perspective of the critical success factors revealed by the literature review for a successful ERP implementation. Question three is aligned with all three research questions. Leader behavior, leadership style, and the leader's experience and education contribute to this question. Question four and five directly addresses the study's first research question and asked what specific leadership behaviors from the participant's perspective were required to complete an ERP implementation successfully. Since the study examined a

completed ERP implementation, question six reviewed the outcomes of the ERP implementation and is aligned with the leader's experience in the second research question. Since the participants are senior leaders, question seven allowed the participants to expound on their experience and perspective on leadership behaviors, experience and education, and their leadership style in an ERP implementation. This question contributed to all three research questions.

The final component of the interview guide was a concluding statement to each participant. The researcher thanked each leader for participating in the study. Additionally, the researcher assured each participant that their comments would be confidential and they would receive a copy of their interview transcript.

The second data collection technique used for this research was the review of associated documents. Yin (2014) noted that documentary information was relevant to every case study topic and should be an object of data collection. For this study, the researcher reviewed a variety of documents (e.g., scholarly articles, presentations, and relevant material). Yin (2014) highlighted that the most critical use of these documents is to collaborate and augment evidence from other sources.

The third data collection technique used for this research was observation. Creswell and Poth (2018) identified four types of observation: complete participant, participant as an observer, observer as a participant, and complete observer. Creswell and Poth (2018) defined participant as an observer as the researcher participating in the activity at the organization. In this study, the researcher operated the Army ERP system and participated in user training classes. Creswell and Poth (2018) indicated that this type of observation helps the researcher gain insider views and subjective data.

The final component of data collection is storing data securely. First, all of the electronic files about the participants were stored only on the researcher's computer, and the machine was password protected. Second, any hard copy documents, such as interview transcripts, the researcher stored these documents in a locked file drawer, and only the researcher had access to the draw. Third, the researcher used codes to identify the participants and their organization to preserve the privacy and confidentiality of the participants. Finally, three years after the researcher has completed the case study, the researcher will destroy all the records from the case.

Data organization techniques. The second principle of data collection is the case study database. Yin (2014) defined the case study database as the orderly compilation of all the data from a case study. The data includes field notes, case study documents, tabular materials, and narratives. The researcher collected the information for this study from ten interviews, review of associated records, and observations by the researcher participating in the activity at the organizational sight.

For this study, the field notes were the first component of the case study database. Yin (2014) indicated that the field notes are the most common component of the database. The field notes come from the interviews, observations, or document review. For this study, the participants' interview transcripts and the notes the researcher took during the meetings were the most significant part of this database section. Additionally, the researcher attached written notes on colored post-it notes directly to the interview transcripts. The color of the post-it notes the researcher assigned corresponded to specific themes in the case study.

The second component of the case study database is the case study documents. Yin (2014) highlighted that these documents require the most significant physical storage space unless the researcher stores them electronically. For this study, the researcher created portable

document format (PDF) files for each of the case study documents and saved them electronically. Additionally, the researcher highlighted vital information in each paper and created an annotated bibliography to summarize the critical information.

Tabular materials are the third section of the case study database. Yin (2014) described the tabular materials as surveys, quantitative data, or counts of observed phenomena. For this qualitative study, there were no items of tabular elements.

The fourth component of the database was the narratives. Yin (2014) highlighted that the narratives take several forms that can consist of the bibliographies or other classifications that help organize the material in the database. Additionally, Yin (2014) indicated that the researcher could create another type of narrative material composed of open-ended answers to the case study questions. Therefore, narratives can serve as the beginning of the case study analysis. In this study, the researcher created narratives for review in the data analysis phase.

Summary of data collection. This section of the project examined the primary instruments, data collection techniques, and data organization techniques of the study. Since this was a qualitative case study, the researcher was the primary instrument for collecting the data. The researcher collected data from participant interviews, associated documentation, and observation. The researcher examined these resources from the perspective of ten senior leaders from a military organization on an Army installation in the Mid-Atlantic region. The researcher organized the data in a case study database. The primary components of the case study database were field documents, case documents, and narratives. For this study, the participants' interview transcripts and the notes the researcher took during the interviews were the most significant part of this database section.

Additionally, the researcher created portable document format (PDF) files for each of the case study documents and created an annotated bibliography to summarize the critical information. The final component of the data organization was the narratives. In this study, the researcher created narratives for review in data analysis, the next element of Section 2.

Data Analysis

In qualitative research, Stake (2010) noted that analysis continues from the beginning of the study and continues up to the final report. Yin (2014) highlighted that the best preparation for conducting the case study analysis was to have an excellent analytic strategy. Yin (2014) noted four strategies to guide the researcher through their analysis. These strategies consist of relying on the theoretical propositions, working your data from the ground up, developing case study descriptions, and examining rival explanations. For this study, the researcher used the theoretical propositions to guide the research, the literature review, and the data analysis. For example, the study highlighted that leader behavior had a critical impact on a successful ERP implementation.

Qualitative data analysis. In addition to the four analytic strategies, Yin (2014) posited five data analysis techniques that a researcher can use to guide their analysis of their case study data. These five techniques included pattern matching, explanation building, time-series analysis, logic models, and cross-case synthesis. Yin (2014) defined these techniques as:

1. Pattern matching compares the findings of the case study with the predicted results before the researcher collected their data.
2. Explanation building is a particular type of pattern matching where the researcher attempts to establish causal links and explains how or why a phenomenon happened.

3. Time-series analysis compares the significant general trend specified before the onset of the case study with the observed (empirical) trend.
4. Logic models are similar to pattern matching but matches empirically observed events to theoretically predicted events.
5. Cross-case synthesis only applies to the analysis of multiple cases and aggregates the findings across a series of other examples.

For this study, the researcher used pattern matching to determine what specific leadership behaviors were required to complete an ERP implementation at an Army installation within the Mid-Atlantic region compared with the predicted results of the literature review. Additionally, the researcher used cross-case synthesis to aggregate the findings of the ten separate interviews.

The researcher used a four-step process to implement the pattern matching technique for analyzing the research questions. The research questions explored how leaders in military organizations effectively implemented an ERP solution. The researcher built the conceptual framework on the theory that leadership is a process whereby the leader influences and facilitates individual and collective efforts to accomplish a shared objective (Yukl, 2012). The researcher designed the data analysis to answer the research questions and test the underlying theory.

The first step in data analysis was arranging the data. The researcher gathered the data by interviewing participants in the study. The researcher recorded and transcribed each interview and provided a copy to each participant. Each participant reviewed their interview transcript and granted their approval of the data.

The second step in the data analysis process was reading the interview transcripts, collecting the details of the case and the chronology of events, and focusing on the themes of the case. Creswell and Poth (2018) indicated that identifying case themes is key to creating a

thorough description of the case. During the open coding step of the analysis, Creswell and Poth (2018) recommended that the researcher develop approximately 30 codes and combine these codes into important themes in the study. Creswell and Poth (2018) indicated that identifying case themes is key to creating a thorough description of the case. Additionally, Creswell and Poth (2018) suggested that identifying case themes is key to creating a complete story of the case. In this study, the researcher paid specific attention to leader behaviors that the participants mentioned that enhanced or hindered the ERP implementation. These leader behaviors supported management commitment, change management, communication, employee empowerment, and linkage to strategy. These behaviors were highlighted and noted in the transcripts. The open coding step required the researcher to read the transcripts multiple times to thoroughly analyze the case themes.

The third step in the data analysis process was axial coding. In axial coding, Creswell and Poth (2018) highlighted that the researcher takes the categories of open coding and relates them to the central themes of the study. As themes emerged, the researcher gave each theme a code number and marked the supporting text with that code. For the behaviors supporting management commitment, the researcher coded as “1” and any text from the transcripts of the interviews that discussed management commitment the researcher marked with a “1.” The researcher posted the codes in the data table under the heading “1- Management Commitment.” Through steps two and three of data analysis, the researcher identified the major themes associated with the data. The researcher used Excel and posted the significant themes that he noted in the interview transcripts.

The fourth step of data analysis was interpreting the data concerning the research questions. The researcher used the data table mentioned in the previous paragraph to conclude

which leader behaviors were mentioned the most by the participants. The researcher determined the significance of the leader behavior on the number of times the action was specified and the strength of the participant's language in the interview. Additionally, the uniformity between the participants' interviews was also reviewed to determine the strength of the comments of the contributors. The researcher's review of the major themes contributed to the researcher's development of the narrative that addressed the research questions. Through this process, the researcher explored the behaviors associated with how a leader successfully implements an ERP in an Army organization.

The researcher completed the data analysis process for each participant's interview. After the researcher completed the analysis of each meeting, the researcher completed a cross-case analysis between the interviews. Through this data analysis process of the ten interviews, the researcher identified the consistent and contradictory findings in the study.

Summary of data analysis. For this study, the researcher used pattern matching to determine what specific leadership behaviors were required to complete an ERP implementation at an Army installation within the Mid-Atlantic region compared with the predicted results of the literature review. During open coding, the researcher paid specific attention to leader behaviors that the participants mentioned that enhanced or hindered the ERP implementation. From the axial coding, the researcher identified the major themes associated with the data. The researcher used Excel and posted the significant themes that he noted in the interview transcripts. The consistent data analysis process contributed to the reliability and validity of the study. The researcher discusses reliability and validity in the next element of Section 2.

Qualitative Reliability and Validity

According to Creswell and Poth (2018), there are many perspectives for validity and reliability within qualitative research. The researcher organized the validation and reliability strategies from the perspective of the researcher, participant, and reader. Creswell and Poth (2018) recommended that the researcher engage at least two validation strategies in a qualitative study. These strategies include triangulation, reflexivity, member checking, collaborating with participants, detailed record keeping and an external audit of the process.

Additionally, Yin (2014, p. 46) indicated that the following four tests served as a framework for assessing case studies in the field of strategic management:

1. Construct validity- identifying correct operational measures for the concepts being studied
2. Internal validity- seeking to establish a causal relationship, whereby certain conditions are believed to lead to other conditions, as distinguished from spurious relationships
3. External validity- defining the domain to which a study's findings can be generalized
4. Reliability- demonstrating that the operation of a study, such as data collection, can be repeated with the same results.

Reliability. Yin (2014) highlighted that the goal of reliability is to minimize the errors and bias in the study; therefore, the researcher should research as if someone was looking over their shoulder. For this study, the researcher established the study's reliability through a fixed process of data collection, data organization, and data analysis. These processes were described previously in this section. Each participant was selected based on the same criteria. Each participant was a senior leader in an Army organization and played an instrumental role in

completing an ERP implementation. The researcher was not in the participants' organization, and there was no previous relationship between the researcher and the participants. Therefore, no bias was introduced into the study by a power imbalance between the researcher and the participants. Second, the same process was used to collect data from each of the participants. Each participant received the same email invitation, consent forms, and personal interview questions. After the researcher collected the data, the researcher used the same process to organize the data, secure the data, and maintain the confidentiality of each participant.

The researcher was the primary data collection instrument in this study. Therefore, the participant interviews were a critical component of the study's reliability. The researcher used the same interview process for each participant. The researcher conducted each interview face-to-face with the participant in the participant's office. The researcher read the same seven open-ended questions verbatim to each participant (Appendix C). The conversations were recorded for accuracy and transcribed precisely for approval from the participants. The researcher gave each participant a copy of their interview transcript.

Validity. According to Yin (2014), there is an internal and external perspective to validity. Creswell and Poth (2018) described internal validity as the accuracy of the findings. In this study, the researcher used triangulation, saturation, reflexivity, and member checking for internal validation. Creswell and Poth (2018) posited that the researcher should corroborate evidence through the triangulation of multiple data sources to establish credibility. In this study, the researcher located evidence from different data sources, and through these numerous sources, the researcher produced corroborating evidence to validate the accuracy of this study. The sources of data the researcher examined were personal interviews, documents, and observations. The researcher examined these resources from the perspective of ten senior leaders from an

Army organization on an Army installation in the Mid-Atlantic region. Additionally, the researcher reached a point of saturation in that the researcher found no additional information that contributed to the understanding of the study. The saturation and the triangulation of the data from these multiple sources added to the consistency of the study's findings.

Second, Creswell and Poth (2018) defined reflexivity as the researcher's understanding of their bias, values, and experience in the qualitative study. In this study, the researcher was not a member of the organization that the researcher examined. Therefore, the researcher did not have the power to bias or influence the participants. Additionally, the researcher clearly stated the process for data analysis to enhance the internal validity of the study.

Third, Creswell and Poth (2018) noted that member checking is a critical technique for establishing internal validity. Therefore, the researcher returned the interview transcript to each participant for their review and concurrence. Although this took additional time, it verified the participant's views and validated the themes and descriptions in the study.

Finally, Yin (2014) noted that the external validity pertained to the generalization of the study's findings. In this study, the population was ten senior leaders in one Army organization on an Army installation in the Mid-Atlantic region. Since the study incorporated one organization on an Army installation, it is challenging to claim high external validity. Although the findings have limited generalization value, this study can be replicated across other organizations in the Army and increase external validity.

Summary of reliability and validity. In this study, the participant interviews were a critical factor in the study's reliability. Consequently, the researcher used the same process for selecting and interviewing each participant. The researcher enhanced the study's internal validity through triangulation, saturation, reflexivity, and member checking. However, the

generalization of the findings is limited because the study examined ten leaders in one organization that had completed an ERP implementation on an Army installation. Although the results have narrow generalization value, this study can be replicated across other organizations in the Army and increase external validity.

Transition and Summary of Section 2

This study examined the critical leader behaviors for a successful ERP implementation on an Army installation in the Mid-Atlantic region. The researcher interviewed ten senior leaders who had completed an ERP implementation on an Army installation and reviewed organizational documents. The researcher used a qualitative case study approach to address the research question. In this section, the researcher described the purpose of the study and the role of the researcher and the participants.

Additionally, the researcher explained the research method and design, population and sampling, and data collection techniques. Finally, the researcher examined the data analysis strategies and the reliability and validity concerns for the study. The author discussed the study's consistent and contradictory findings from the data analysis in the following section.

Section 3: Application to Professional Practice and Implications for Change

The Army is continually overcoming numerous complexities that jeopardize its ability to rapidly resource combat operations and preserve its tactical and technical advantage. Enterprise Resource Planning (ERP) has emerged as one of the breakthrough information technologies that can reshape business practices. The ERP system is the central component of the Army's business mission process. According to Li et al. (2016), the primary determinant of a successful ERP implementation is leadership. This study examined the behaviors exhibited by leaders successfully completing an ERP implementation at an Army installation in the Mid-Atlantic region.

The researcher presented the findings for this case study in this section. These findings will contribute to the existing research regarding ERP implementation in an Army Organization. The section is divided into eight parts: (1) overview of the study, (2) anticipated themes/perceptions, (3) presentation of the findings, (4) applications to professional practice, (5) recommendations for action, (6) recommendations for further study, (7) reflections, and (8) summary and study conclusions.

Overview of Study

This qualitative case study examined how military and civilian leaders utilized specific behaviors to implement an Army ERP on an Army installation. The general problem to be addressed was that few companies complete their ERP implementation on time and within budget, and the incidences of underperformance and failure are incredibly high. Li et al. (2016) noted that only 35 percent of companies in the United States completed their ERP implementation on time and within budget and the occurrences of underperformance and failure are as high as 90 percent. The specific problem to be addressed was the inability of leaders at

Army installations in the Mid-Atlantic region to complete an ERP implementation successfully. According to Li et al. (2016) and Subramanian and Peslak (2010), the primary determinant of a successful ERP implementation is leadership.

The purpose of this qualitative study was to understand the relationship between leader behavior and ERP implementation better. Therefore, the research questions for this study were:

1. What are the specific leadership behaviors required to complete an ERP implementation at an army installation within the Mid-Atlantic region?
2. How does the leader's education and experience contribute to a successful ERP implementation?
3. How does the leader's leadership style influence a successful ERP implementation?

For this study, the researcher utilized the qualitative research method and the case study design. The researcher interviewed 10 participants from an Army organization located on an Army installation in the Mid-Atlantic region of the United States. The researcher presented research questions regarding how leadership behaviors affect a successful implementation of ERP, it did not try to control the action of the study participants, and the study focused on contemporary issues.

The field study findings were fourfold. First, from the findings of the study, the researcher reconfirmed the behavioral leadership theory. The researcher focused on the leaders' actions and showed that leaders could be developed. Second, the results highlighted the specific leadership behaviors that were crucial in implementing GCSS-Army on an Army installation. The primary leader behaviors examined were management commitment, change management, communication, employee empowerment and linkage to strategy. The researcher found management commitment and change management to be the two most critical behaviors in an

ERP implementation. Although communication was essential, the researcher found that communication could be a part of management commitment and change management.

Additionally, the researcher found that employee empowerment was needed, but it could also be an outcome of the ERP implementation. Finally, the researcher found that linkage to strategy was the least critical factor in an ERP implementation. Third, the researcher provided support for task-oriented actions, relationship-oriented behaviors, change-oriented behaviors, and external behaviors in an ERP implementation. The researcher identified each of these behaviors in the development, deployment, and sustainment phases of the Army ERP implementation. Fourth, the researcher found that leaders must continue to seek experience and education.

Anticipated Themes/Perceptions

In this study, the researcher developed potential themes that addressed leader behavior in a successful implementation of an ERP at an Army installation in the Mid-Atlantic region. According to Garg and Chauhan (2015), a successful ERP implementation is mainly dependent on the leader's behavior. Similarly, Usmanij et al. (2013) indicated that implementation challenges relate more to behavioral and management issues than to technical difficulties. The central theme of this study was that the behavioral approach to leadership was essential to the study of leader behavior and ERP implementation. Yukl (2012) incorporated behavior into the four meta-categories of task-oriented, relationship-oriented, change-oriented and external.

The second theme in the study of a successful ERP implementation was leadership and management commitment. Li et al. (2016) noted that leadership and top management support were the most crucial success factors in an ERP implementation. Garg and Agarwal (2014) concluded that top management support was defined by providing valuable resources and controlling the whole implementing process. Additionally the literature defined management

commitment as giving a clear vision, goal, and plan for the ERP implementation. During an ERP implementation, the primary inter-relationship between management commitment and leader behavior was in task-oriented behaviors.

A third potential theme in this review was leader behavior and change management. Pishdad and Haider (2013) highlighted that an ERP implementation changes how an organization operates and may initiate changes in the organizational culture. Similarly, Althonayan and Althonayan (2017) noted that ERP implementations in the public sector often fail because of stiff resistance from the employee. Change management begins by the leader creating dissatisfaction with the status quo. Then, the leader must move the members of the organization from one set of behaviors to another. Finally, the leader institutionalizes the new pattern of behavior into the new status quo. The primary inter-relationship between change management and leader behavior during an ERP implementation were in the task-oriented behaviors and change-oriented behaviors.

A fourth potential theme in this review was leader behavior and communications. Muthuveloo et al. (2017) noted that leaders lead through effective communication. Likewise, Garg and Chauhan (2015) highlighted that poor communication is one of the top contributors to ERP implementation failures. The two types of communication within an ERP implementation are enterprise-wide communication and interdepartmental communication. The enterprise-wide communication crossed organizational boundaries and spanned the enterprise, from the soldier to commercial suppliers and manufacturers to other military services to the Department of the Army. However, the interdepartmental communications involved sharing information between the project teams regarding the results and the goals during each stage of the ERP implementation. The primary inter-relationship between enterprise-wide communications and

leader behaviors during an ERP implementation were relationship-oriented behaviors and external behaviors. However, during interdepartmental communication leaders should exhibit relationship-oriented behaviors.

A fifth potential theme in this review was leader behavior and employee empowerment. Spoehr (2015) noted that Army leaders must empower their subordinates with authority and training to improve the business processes of the Army. Therefore, subordinates play an active role in an ERP implementation. Employee empowerment reduces user resistance and aligns employee acceptance with the new business processes in the ERP implementation. The primary inter-relationship between employee empowerment and leader behavior during an ERP implementation was in relationship-oriented behaviors.

A sixth potential theme in this review was leader behavior and strategy. Pollard and Morales (2015) defined business strategy and information technology as the measure of alignment between the objectives of information technology with the business objectives of an organization. Katerattanakul et al. (2014) noted there is a positive relationship between the success of the ERP system and the alignment of the ERP implementation and the company's business strategy. Therefore, the primary inter-relationship between strategy and leader behavior during an ERP implementation was in task-oriented behaviors.

Perceptions. Reitz (2017) noted that perceptions are different than anticipated themes because perceptions are more subjective than themes. Within qualitative research, both the researcher and the participants bring their perspective to the research study. These perspectives refer to the perceptions of the researcher and the participants and have an impact on the outcome of the investigation. Therefore, the researcher must keep their focus on learning the meaning of the participants' perceptions about the problem, or issue.

The participants acknowledged the previously stated themes. However, the study reflects the multiple perceptions of the participants. The participants' perceptions varied from the anticipated themes in communication, employee empowerment, and linkage to strategy.

The participants all agreed that excellent communication was essential in an ERP implementation and that leaders were instrumental in good communication. However, the participants perceived that management commitment and change management were the two most critical factors in an ERP implementation. The participant's perception was that communication was a part of management commitment and change management.

The participants acknowledged the importance of employee empowerment. However, in certain instances, the participants perceived that employee empowerment was an outcome of the ERP implementation and not a precursor. The participants understood that the GCSS-Army implementation empowered the military users compared with the capability that the users had with their legacy logistics systems. Additionally, the participants saw that leaders empowered their people and enabled them to make decisions, but that the leader had to train their employees to manage the responsibility properly. Therefore, employee empowerment was a training issue during the ERP implementation rather than a critical implementation factor.

The participants perceived that the linkage between strategy and an ERP implementation was the least critical factor. The participants described the linkage between the ERP implementation and strategy from multiple perspectives. These perspectives were a fielding strategy, acquisition strategy, operations strategy, and an overall enterprise strategy. Each view was based on the participant's role in the Army ERP implementation.

Presentation of the Findings

The presentation of the findings from this qualitative case study analysis includes a detailed understanding of the conclusions that addresses all of the research questions and relates the results to the larger body of associated literature. The researcher organized the findings by themes, patterns, and relationships. Additionally, the researcher examined the outcomes through the viewpoint of the conceptual framework. The researcher built the conceptual framework for this study upon the knowledge that leadership is a process whereby the leader influences and facilitates individual and collective efforts to accomplish a shared objective (Yukl, 2012). According to Yukl (2012), over a half-century of research provides the support that leaders can enhance the performance of their organization through their behaviors that are relevant to the situation.

Similarly, Sampayo and Maranga (2015) noted that scholars based the behavioral leadership theory on the belief that leaders can be developed, and are not just born with inherent leadership characteristics. The purpose of this study was to better understand the relationship between the leader behavior and an ERP implementation on an army installation. Therefore, this approach focused on the leaders' actions, and not on their mental qualities, personality traits, or capabilities.

The researcher gathered the data for this study from participants in one Army organization in the Mid-Atlantic region. The information was collected by interviewing the senior leaders directly responsible for implementing the Global Combat Support System-Army (GCSS-Army) on an Army installation. Additionally, the study participants were asked to review their interview transcripts for accuracy and correctness

Case study organization. Organization A was the Army organization in this case study that has the overall responsibility for developing, implementing, and sustaining the Army ERP system throughout its entire lifecycle. Organization A's leaders are fulfilling the Congressional mandate of making the Army tactical units auditable in supply and maintenance by implementing GCSS-Army across the Army enterprise. Organization A is headquartered on an Army installation in the Mid-Atlantic region of the United States, and its members are military officers, Department of the Army civilians, and contractors. Organization A's approach for ERP development, implementation, and sustainment established the organizational structure and the senior leaders' respective areas of responsibility.

The first division within Organization A is responsible for the budget, contract coordination, and operational support for the organization. This division manages the organization's support agreements, budget execution, and financial management. The division's responsibilities include maintaining all of the life support for the organization such as personnel, contracts, resource management, budget execution, security, public affairs, and the strategic communications for the organization.

The second division within Organization A is responsible for assuring the supportability of the GCSS-Army system. This division systematically identifies, produces, acquires, delivers, installs, and upgrades the logistics capability of the receiving Army organization by implementing GCSS-Army in the Army unit. Organization A's second division has replaced the Army's older management information systems for ground maintenance, aviation maintenance, and supply with GCSS-Army.

The third division within Organization A is responsible for the technical aspects of the Army ERP system. This division is the lead for risk management, configuration, and data center

management. Therefore, Organization A structured this division into an enterprise integration group and a cybersecurity group.

The fourth division within Organization A supports the technical implementation and the life cycle development of the SAP software for GCSS-Army. The division manages, resources, tests, and obtains final approval for implementing the software changes in the Army ERP system. The division coordinates these requirements with other Army agencies outside of Organization A.

The researcher examined the case study organization through personal interviews, personal observation, and relevant document review. The researcher's purpose for collecting data was to determine which specific leader behaviors were critical for a successful ERP implementation on an Army installation. The study participants identified several leader behaviors supportive of an ERP implementation on an Army installation.

The Army ERP system. GCSS-Army uses Commercial Off-The-Shelf (COTS) software provided by the company SAP and tailors the software to the unique needs of the Army. The customized SAP software provides increased adaptability, flexibility, and efficiency in support of the Army's unique tactical logistics sustainment requirements. This Army ERP system is an automated information system that serves as the primary tactical logistics enabler supporting the Army and the joint transformation for sustainment. It tracks supplies, spare parts, and organizational equipment.

Additionally, GCSS-Army manages unit maintenance, the total cost of ownership, and other financial transactions related to logistics for all Army units. Furthermore, the Army ERP re-engineers current business processes to achieve end-to-end logistics and integration with applicable command and control systems. Participant 4 explained that GCSS-Army enabled the

U.S. Army supply chain by focusing primarily on the enterprise logistics activities that occur in the supply support activities (SSA), and the associated financial transactions that go along with the logistics transactions. GCSS-Army is the computer system that runs Army maintenance and the Army supply rooms (both at the motor pool and the unit supply). At the end of the day, GCSS-Army is an enterprise resource planning system which gets rid of a lot of the legacy Standard Army Management Information Systems (STAMIS), such as the Standard Army Maintenance System (SAMS), the Standard Army Retail Supply System (SARSS) and the Property Book User Supply Enhanced (PBUSE). Therefore, GCSS-Army has reduced the number of logistics business systems in the Army, has flattened the Army supply chain, and communicates more data throughout the enterprise (personal communication, January 30, 2019). Consequently, this Army ERP system enables soldiers and Army decision-makers to make better and quicker decisions based on the facts and the data.

Based on lessons learned from the initial operational test and assessment of GSCC-Army, McDonough (2016) noted that implementing the Army ERP system to the receiving organizations with all of its capability at once would have caused multiple challenges in these units. Therefore, the leaders in Organization A elected to divide the first implementation of GCSS-Army system into two waves. Wave 1 delivered tactical financial functionality and replaced SARSS capability in all of the supply support activities (SSAs) worldwide. This wave began in October 2012, and the leaders completed the implementation in March 2015. Wave 2 provided Property Book capability, unit supply, and maintenance functionality worldwide, and replaced the legacy property book system and standard Army maintenance system. The leaders completed the implementation of Wave 2 in November 2018. Although Increment 1 of GCSS-Army is in the sustainment phase, Organization A is continuing to refine and improve the ERP

processes. Therefore, there is a continuous improvement process effort ongoing during the sustainment phase.

Additionally, Organization A is planning the implementation of Increments 2, 3, 4, and 5 for GCSS-Army. Increment 2 is the aviation solution to the Army ERP system, and it is in development. Participant 2 noted that the physically coding for the aviation solution has started but that the system has not gone into fielding and deployment. Increment 3 is the transportation solution to GCSS-Army, and it is in prototyping (personal communication, January 28, 2019).

Leader behaviors for an ERP implementation. According to Ali and Miller (2017), Coeurderoy et al. (2014), and Abbasi et al. (2014), the most critical behaviors that support an ERP implementation are those that support management commitment and change management. Additionally, Basu and Bhola (2016) cited management support, employee empowerment, communications, and strategy as critical in an ERP implementation. Likewise, the participants in this study noted that the vital leader behaviors instrumental in a successful ERP implementation fell within these five factors.

Leaders demonstrate management commitment. Management support and commitment are the most critical factors in a successful ERP implementation (Saade & Nijher, 2016; Garg & Agarwal, 2014; Pishdad & Haider, 2013). Although not explicitly defined, Garg and Khurana (2017) noted that an ERP implementation must incorporate the support of the top management. Accordingly, top management commitment and senior executive involvement improves internal communication and creates more effective and proper collaboration and integration.

Spoehr (2015) noted that to drive performance and process improvements across the Army enterprise continuously, the new operating framework will only succeed with the continued and complete support of the Army leader. Leaders from the case study organization

indicated that management support must be demonstrated from the highest levels of the Army down to the soldier level. The leader behaviors that showed management commitment were predominately task-oriented; however, there were some relationship-oriented and change-oriented behaviors.

Participants 1, 2, 6, and 10 explained that the most significant influence in deploying the Army ERP system down to the military organization on an Army installation was leadership involvement. Participant 2 stated, “The biggest thing that we have found, especially fielding GCSS-Army down to the lowest level was the leadership involvement” (personal communication, January 28, 2019). Leaders get involved in the ERP implementation by setting an example for their soldiers to follow. If soldiers see their leaders participating in the GCSS-Army fielding and training, then the soldiers will be involved in the Army ERP implementation. Participant 6 explained that if the command was not involved and emphasizing the ERP deployment, then the soldiers were not going to follow (personal communication, February 1, 2019). Leading by example is evidence that the leader is personally committed to the ERP implementation. Participant 10 clarified that management commitment was more than just saying the ERP implementation was essential. Leaders had to be involved and be participants in the process; the leaders made sure their people were where they needed to be successful (personal communication, February 8, 2019). However, if the Army leaders never show up for the ERP training, then the soldiers assumed that the practice was not essential and they were not actively engaged. Monitoring classroom instruction was task-oriented behavior. The leader was directly observing teaching and using the Army ERP system. Participant 1 noted that leader involvement meant the leaders were active, setting the example and coaching their soldiers

through the GCSS-Army implementation. Leader involvement was essential (personal communication, January 28, 2019).

Participants 2, 6, and 7 highlighted that if the military organization did not get complete leadership commitment, the unit continued to embrace its current legacy systems and did not adopt the new processes and technology well. Participant 6 noted that the leadership must understand that the Army designed the legacy systems around regulations, and Organization A designed the Army ERP system around business processes. Thus, there were challenges with new terminology. The soldiers questioned why GCSS-Army did not use the legacy terminology (personal communication, February 1, 2019). The lack of total leader commitment caused the group to experience a below average transition to the Army ERP system. Participant 7 noted extreme contrasts in performance from unit to unit depending on how much leadership commitment the organization achieved. The poor transition to GCSS-Army caused the military organization to need over two years to normalize operations (personal communication, February 1, 2019).

The leaders at Organization A implemented GCSS-Army at all types of Army organizations, including combat units. Participant 2 noted that Organization A deployed GCSS-Army to approximately 160,000 military users worldwide (personal communication, January 28, 2019). Therefore, if the unit combat commander for the organization receiving the GCSS-Army did not understand the value of the Army ERP system to his mission, he was less inclined to stop the combat training and implement GCSS-Army.

Participants 1, 2, and 6 highlighted that the leaders at the Army organization receiving GCSS-Army must clarify that the unit's priority is implementing GCSS-Army and that this system will enhance unit readiness. Participant 1 stated, "It goes right back to command

emphasis. Soldiers were very involved when their commands stressed the importance of GCSS-Army and understood how it impacted their readiness” (personal communication, January 28, 2019). Defining the priority of ERP implementation was task-oriented behavior. Participant 2 emphasized that if the commander was not committed to making sure that the fielding of GCSS-Army was a priority, the GCSS-Army implementation kept getting pushed to the back burner (personal communication, January 28, 2019). Therefore, management commitment was essential, especially in the realm of training, fielding, and deployment of GCSS-Army to the Army organization. Participant 6 noted that command emphasis was a component of management commitment. If the command was not involved and did not emphasize the GCSS-Army implementation, the subordinates were not going to follow (personal communication, February 1, 2019).

Management commitment was more than saying this ERP implementation was essential. The leaders must demonstrate behavior that sets the example and they are a participant in the ERP process. Participant 1 noted that leaders needed to attend training, to get energized, to make sure they understood what was coming at them. The leader must understand the importance of the role of the soldier. When the commanders do that, they were successful. If leaders were not committed to the Army ERP system, did not understand the importance of this ERP implementation, and were not willing to make sure that soldiers were 100% committed and ready to participate, their units presented the biggest challenges for successfully implementing GCSS-Army (personal communication, January 28, 2019).

Participants 3, 4, and 10 noted that management commitment in an ERP implementation was not only required at the organization receiving GCSS-Army, but also at the strategic level that was directing and resourcing the ERP implementation. Participant 4 explained that you had

to have leadership commitment at the senior levels and Organization A had leadership sponsorship at the 4-star level (personal communication, January 30, 2019). If the ERP deployment did not have priority at the unit receiving the ERP system, the unit soldiers did not participate in the training and did not learn how to operate the Army ERP effectively.

Participant 10 noted that for an ERP implementation, you must have senior level involvement at the general officer or senior executive service level; otherwise, you never achieved total management commitment. The leaders implementing the Army ERP needed management commitment from the strategic level to redirect the local commander's priority. Participant 3 noted that Organization A had senior management support at the strategic level. On one occasion, Organization A had Senior Executive Service officials sending a General Officer messages saying they needed to get this unit to training, and they needed to participate, or they were going to fail (personal communication, January 30, 2019). The top leaders utilized task-oriented behavior by enforcing the priority of implementing GCSS-Army. Additionally, the senior army commander showed relationship-supporting behaviors by providing support in the difficult task of implementing an ERP.

Additionally, Participant 4 highlighted that there was senior level commitment at the highest levels of the Army for implementing GCSS-Army. Participant 4 noted that the Army Material Command (AMC) commander and the Army G4 were involved, and very supportive. The AMC Commander was appointed the ERP authority for the Army. This designation provided a 4-star sponsor for all logistic ERPs in the Army, and it strengthened the management commitment from the highest levels of the Army down to the soldier level (personal communication, January 31, 2019).

Garg and Agarwal (2014) posited that top management support was defined by providing valuable resources and controlling the whole implementing process. The leaders, in this case, highlighted that one critical resource that they provided in implementing the Army ERP was a help desk. The ERP help desk was an example of how leaders in Organization A utilized the task-oriented behavior of problem-solving to deal with disruptions in normal operations.

Participants 5, 7, and 9 highlighted that if any user was having trouble operating the Army ERP system. Participant 5 explained that the soldier could call the ERP help desk 24 hours a day, seven days a week. Most soldiers called because they did not know how to do a specific logistic process or they had forgotten how to execute a particular transaction. Participant 5 noted that 82 percent of the soldiers' issues were resolved during the call (personal communication, January 31, 2019).

Participant 9 also highlighted that the GCSS-Army help desk worked very well. The help desk was set up to monitor the enterprise data continually. Instead of having to wait for a user to call and tell Organization A that something is wrong, Organization A already knew it. Therefore, the help desk analyst solved tickets quickly (personal communication, February 5, 2019).

Participant 7 explained that if a military organization was having trouble operating the Army ERP system, then the leaders in Organization A could go into the GCSS-Army and see precisely what the soldier was doing wrong. GCSS-Army provided Organization A's leaders logistics visibility around the world. The leaders observed the activities that were causing the soldier problems in executing an ERP transaction and developed relevant training to solve the issue. Organization A's leaders have subject matter experts in each of the business centers of maintenance and supply that can isolate the specific mistake the soldier is making and develop a

training lesson that addresses the particular training issue. Instead of presenting a standard 40-hour training package that may not be useful, this resource targets training for a specific military organization (personal communication, February 1, 2019).

Participants 1, 2, and 6 revealed that Army units who had leaders that were committed to GSCC-Army and encouraged their soldiers' commitment to this change, successfully implemented the Army ERP in their organization. Likewise, Participants 3, 4, and 10 noted that management commitment in an ERP implementation was not only required at the organization receiving GCSS-Army, but also at the strategic level that was directing and resourcing the ERP implementation. Therefore, commitment by the leaders and soldiers in the organization receiving the Army ERP system and by senior management was essential. Participants 5, 7, and 9 highlighted that management commitment also included other critical resources for correcting technical, operational, and training issues.

Leaders facilitate change management. The impact of leader behavior on change management is essential to the success of an ERP implementation (Bin Taher et al., 2015). A successful ERP implementation at an Army installation is mainly dependent on the practical completion of the change management activities focused on the soldiers in the military unit receiving the Army ERP. GCSS-Army utilizes SAP software and requires changes in terminology, logistics business processes and procedures, regulations and policies, and soldier skill sets. Althonayan and Althonayan (2017) noted that ERP implementations in the public sector often fail because of stiff resistance from the employee. The purpose of the change management process is to help the soldiers understand the reason for the change, gain the soldiers involvement, create a commitment to change, and ensure the transition takes hold. The primary inter-relationship between change management and leader behavior during the ERP

implementation was in change-oriented behaviors. The change-oriented behaviors were advocating change, envisioning change, and facilitating collective learning. The leaders also used the task-oriented behaviors of clarifying, monitoring and planning.

Shao et al. (2016) found that leaders who successfully implemented an ERP took charge of the specific implementation process and reduced resistance to the project. Participants 1, 6, and 9 noted that initially there was much resistance to implementing GCSS-Army at the military organization. Many soldiers thought it was impossible to integrate supply, maintenance, property book, and finance into one system. Previously, the four legacy information systems managed these functions. However, Participant 1 noted that they changed the soldiers' mindset about how the Army operates. Once the soldiers recognized that GCSS-Army worked, they accepted the Army ERP system (personal communication, January 28, 2019). Participant 6 noted that the Warrant Officers and senior Noncommissioned Officers (NCOs) were more resistant to GCSS-Army than the younger soldiers. Many of the Warrant Officers and Senior NCOs did not think it was possible to bring all of these legacy systems, such as SAMS, SARSS, and PBUSE into one ERP system (personal communication, February 1, 2019).

Similarly, Participant 9 highlighted that the younger soldier were the ones that accepted GCSS-Army and wanted to go the training and learn how to use the Army ERP. However, the older soldiers were more resistant because it was not what they wanted, they did not think it would work, and they were not accustomed to doing business this way. Participant 9 stated, "We had quite a time with them" (personal communication, February 5, 2019). The leaders advanced GCSS-Army by developing a change management plan, disrupting the status quo, and facilitating collective learning of the new system.

Participants 1, 6, 7, and 10 noted that Organization A utilized a change management plan to promote GCSS-Army. According to Participant 1, the program began a year before the leaders implemented GCSS-Army at the military organization. The purpose of the campaign was to help the soldiers build a personal commitment to change to GCSS-Army because the Army ERP system changed terminology, logistics business processes and procedures, regulations and policies, and the soldiers' skill sets. The first stage of the campaign was to establish contact with the military personnel at the installation and introduce them to the Army ERP. The second stage of the campaign was to build awareness of the concepts of GCSS-Army. The third stage of the campaign was to make sure the soldiers understood the impacts of GCSS-Army on the Army and their functional areas. The fourth stage of the campaign created a positive perception of the Army ERP with the soldiers and helped them understand how it would benefit them. The fifth stage of the campaign was to help the soldiers adopt the implementation of GCSS-Army. The final phase of the marketing campaign was to help the soldiers internalize the Army ERP system and create innovative ways to use and improve the system (personal communication, January 28, 2019).

This campaign drove the organizational leaders to use the change-oriented behaviors of advocating change, envisioning change and facilitating collective learning. Participant 7 stated, "You can't do enough with change management" (personal communication, February 1, 2019). During the change management plan, Organization A's leaders demonstrated to the military personnel at the Army installation the need for change, and they articulated a vision for the Army ERP implementation for the next year. Additionally, the campaign provided feedback from the training, and the leaders assembled the feedback, facilitated the collective learning, and optimized the practice.

Although Organization A had a change management plan, Participant 10 emphasized that the leaders in Army organizations receiving GCSS-Army did not take the Army ERP seriously. The leadership in the receiving units believed that GCSS-Army was a replacement system for Standard Army Maintenance System (SAMS), the Standard Army Retail Supply System (SARSS), and the Property Book User Supply Enhanced (PBUSE; personal communication, February 8, 2019). Participant 6 highlighted that GCSS-Army was completely different than these legacy systems because it changed terminology, logistics business processes, and procedures, regulations, and policies (personal communication, February 1, 2019).

Consequently, Participant 10 noted that Organization A did not have the change management plan that the system needed. The organizational change management team was initially over 30 personnel, but was reduced to three people by the implementation of the first wave of GCSS-Army. One consideration for this reduction in the change management team was that GCSS-Army started in 2004, but the deployment of the first wave did not begin until 2012. Therefore, Participant 10 noted that Organization A received a budget decrease and accepted the risk in the change management team (personal communication, February 8, 2019).

Participants 7, 9, and 10 noted that Organization A's leaders divided the initial implementation of GCSS-Army into two waves due to the complexity of the SAP software and the disruption that a complete implementation of GCSS-Army capability would create in the military organization. Participant 10 indicated that Wave 1 delivered tactical financial functionality and replaced SARSS capability in all of the supply support activities (SSAs) worldwide. This wave began in October 2012, and the leaders completed the implementation in March 2015. Wave 2 provided property book capability, and unit supply and maintenance functionality worldwide. It replaced the legacy property book system and the Standard Army

Maintenance system. The leaders completed the implementation of Wave 2 in November 2018 (personal communication, February 8, 2019). Although Increment 1 of GCSS-Army is in the sustainment phase, Organization A is continuing to refine and improve the ERP processes. Therefore, there is a continuous improvement process effort ongoing during the sustainment phase.

The wave approach enabled the change management plan by reducing the disruption in the military organization at one time. Participant 7 noted that the two waves were less turbulent to the military organization and allowed the leaders to build continuity within the unit. Therefore, the user gained some experience with GCSS-Army and was familiar with the capabilities in the SSAs before the leaders implemented maintenance, supply, and property book capabilities in the military organizations. Participant 9 highlighted that the GCSS-Army implementation process had improved from Wave 1 to Wave 2 because this was a team effort. The leaders realized they were working with the same people in Wave 2 that they had worked with in Wave 1 (personal communication, February 5, 2019).

Participants 1, 6, and 9 stressed that initially there was much resistance to implementing GCSS-Army at the military organization. Organizational leaders applied change-oriented behaviors of advocating change and envisioning change and the task-oriented behavior of planning in their change management program. Participants 7, 9, and 10 noted that implementing an ERP implementation creates confusion and doing a complete rollout of the GCSS-Army capability could have been destructive to the unit readiness. By breaking the GCSS-Army implementation into two waves, the leaders exhibited the task-oriented behaviors of establishing priorities, scheduling activities, and allocating resources to improve the success of the Army ERP implementation.

Leaders communicate. According to Garg and Chauhan (2015), poor communication is one of the top contributors to ERP implementation failures. However, Muthuveloo et al. (2017) noted that excellent communication enables the leader in fostering trust and encouraging others to follow. Toves et al. (2016) pointed out that the purpose of good communication is to reduce uncertainty due to the imperfect knowledge of reality. Therefore, good communication from senior leadership to the frontline workforce is essential. Toves et al. (2016) noted that poor communication leads to a long-term ERP implementation process because employee uncertainty creates instability problems in the organization that leads to low morale, low commitment, and resistance to change.

Within an ERP implementation, researchers identified two levels of communication. Garg and Garg (2014) and Gavidia (2016) noted that enterprise-wide communication is one of the most significant factors for a successful ERP implementation. Bintoro et al. (2015) indicated that interdepartmental cooperation is essential for understanding and approving the ERP implementation and sharing information between the project team and the organization regarding the results and the goals during each stage of the ERP implementation. The leader behaviors that demonstrated communication were based upon whether it was enterprise-wide communication or interdepartmental communication. Enterprise-wide communication was mostly task-oriented behaviors, and the interdepartmental communications were relationship-oriented behaviors.

All participants agreed that good communication is essential and that leaders are instrumental in good communication. However, Participant 9 emphasized that communication was the most critical factor in Organization A. Participant 9 noted that their facility negatively impacted Organization A's interdepartmental communications on the military installation. Previously, Organization A's open facility contributed to the information flow within the group.

Participant 9 highlighted that the continuity of information flow within Organization A allowed the team to solve issues within minutes (personal communication, February 5, 2019). However, when Organization A moved on the Army installation, the team members were located on different floors in the building. The physical separation between team members inhibited communications and reduced response time to issues. The leader's behavior linked to interdepartmental communication were more relationship-oriented behaviors such as supporting. As cited previously, the team members worked together and shared data to assist each other in completing the necessary work order.

Participants 3, 4, 7, and 9 noted that communications spanned the enterprise from the soldiers on the Army installation to the senior executives and general officers at the Department of the Army G4. Participant 4 emphasized that the leader needed one communication style when interacting with the soldiers at the installation and another style while interacting with the executives at the strategic level (personal communication, January 30, 2019). The leaders at the strategic level had higher levels of experience, used a different set of terminologies, understood the strategic view of how the national military strategy impacted the enterprise; however, the soldiers at the Army installation had a tactical perspective. The leader behaviors associated with enterprise level communication are task-oriented behaviors such as clarifying the task, priorities, and deadlines. Additionally, the leader was monitoring operations at the user level by examining communications, reports, and GCSS-Army performance.

Participant 3 revealed that good communication in fielding GCSS-Army required an understanding of the new terminology. For the soldiers to understand GCSS-Army, Organization A's leaders had to align the old language associated with the legacy information systems of SARSS, SAMS, and PBUSE with the new vocabulary related to the Army ERP

system. For example, in the legacy system, a soldier bought parts with a requisition, but in GCSS-Army, the soldier used a purchase order. Effective communication was dependent on the soldier understanding the new terminology and was essential in successfully implementing GCSS-Army. Participant 3 stated, “Our success with implementing GCSS-Army was based on communicating to the soldier in the field. If they understand what you’re saying, it’s going to go well. If they’re not, it’s going to fail – it’s as simple as that” (personal communication, January 30, 2019).

Participant 7 highlighted that the leader must continue to communicate the need to evolve, or the soldier would resist the change and gravitate towards the old way of doing business. Participant 7 stated, “You are moving to an ERP because the old way of doing business isn’t working. You should embrace the challenge, and accept the Army ERP system. The leader communicated the change, so communication is a sub-component of change management” (personal communication, February 1, 2019). Bin Taher et al. (2015) noted that communication is a crucial component for managing change in the public sector and that it helps to educate employees about the purpose of change and ensures their commitment. Therefore, Bin Taher et al. (2015) supported the idea that communication is part of change management and management commitment.

Although communication is essential, all participants except Participant 9 believed that management commitment and change management were the two most critical factors in an ERP implementation and that communication was a part of change management. Participant 9 stated, “Although I think that communication is more important in Organization A, I believe change management would’ve been the number one factor for the soldier and the other users in the Army units” (personal communication, February 5, 2019).

Leaders facilitate employee empowerment. According to Spoehr (2015), Army leaders must empower their subordinates with authority and training to improve the business processes of the Army. Pishdad and Haider (2013) posited that subordinates must realize that they are not a passive user of the ERP system but have a more significant role in an ERP implementation. Therefore, user involvement is one of the most significant factors in an ERP implementation project. Garg and Garg (2014) recommended that the user should be involved during the entire ERP implementation to reduce user resistance and align employee acceptance with the new business processes. Consequently, when ERP users believe leadership hears their voice, they are more confident the system is beneficial and are more open to accepting it.

Participants 4, 5, 6, 7, 9, and 10 noted that the leaders in Organization A acknowledged employee empowerment. Participant 4 highlighted that the best ideas for changing GCSS-Army came from the soldiers and the users who are examining the different ERP processes. However, Participant 4 noted that if people do not think that their leadership is listening to them, they are not going to say anything. Therefore, it is essential for senior leadership to listen to their employees and their user community. When soldiers see that the leaders care about them, listen to them, and trust them, they feel empowered and contribute to the sustainment of the ERP system (personal communication, January 30, 2019).

Similarly, Participant 5 noted that the leader's trust of the employee is related to the employee empowerment. Participant 5 stated, "You will get employee empowerment to the extent that the leader trusts you" (personal communication, January 31, 2019). Participant 5 noted that for the senior military leaders leading Organization A to be successful, it is essential to empower their senior civilian leaders and employees. Implementing an ERP system on an Army installation is a complex operation, and Organization A's current and former military leaders

have all had different specialties and backgrounds. Although all of the top Army leaders in Organization A are acquisition officers, they have different military specialties and experiences (e.g., signal corps officer, a quartermaster officer, an infantry officer, and a chemical officer). These different military specialties did not give them all of the knowledge they needed to lead an ERP implementation. Therefore, a senior leader needs to establish trust and empower their employees. Participant 5 stated, “Since Organization A’s top military leader changes every couple of years, they must trust and empower the civilian leaders and employees because they have been with Organization A’s program longer and have had more experience with the GCSS-Army implementation” (personal communication, January 31, 2019). Therefore, employee empowerment was critical to successfully implementing GCSS-Army.

Participant 10 aligned employee empowerment with management commitment. Participant 10 noted that if you have management commitment, the leaders are involved; if the leaders are involved, then the employees are empowered (personal communication, February 8, 2019). One example of this idea was the lead user program. Participant 6 noted that the lead user program empowered soldiers in the users’ organization. In the lead user program, the Army unit receiving GCSS-Army identified outstanding soldiers in their organization to be lead users with the Army ERP. The lead users received advanced training; so they could go back to their organization and be champions for GCSS-Army and start talking to the soldiers in their command so they could understand the Army ERP (personal communication, February 1, 2019).

Participant 7 acknowledged employee empowerment comes from the soldier accepting the implementation of GCSS-Army and learning to use it effectively (personal communication, February 1, 2019). In this instance, the leader was using task-oriented behavior and clarifying that their task was to learn to use GCSS-Army effectively. Participant 7 noted that implementing

GCSS-Army empowered the soldier and streamlined the soldier's job. The soldier does not have multiple logistics systems such as SAMS, SARSS, and PBUSE to perform maintenance. Now, a maintenance soldier who needs a part can order the part from his handheld device, walk up to the supply shop, pick up and scan the piece, and go back to work. Participant 9 noted that GCSS-Army provides the soldier with real-time information, and the location of all inventory (personal communication, February 5, 2019).

Although considerable research has highlighted the importance of empowering employees, not all existing studies endorsed employee empowerment. Alhirz and Sajeev (2015) emphasized that leaders in organizations in Saudi Arabia limited employee empowerment because they were concerned about losing their control over employees after implementing an ERP system. Therefore, there can be negative consequences to employee empowerment.

Participant 8 revealed that Organization A's leaders recognized not only the positive results of employee empowerment but also the possible negative consequences. Participant 8 noted that sometimes leaders empowered their people and enabled them to make decisions, but the leader did not ensure that the authorized employee understood the strategic view of the ERP implementation. Therefore, the employee made a decision based only on local considerations and did not understand the strategic implications of their choice. Participant 8 highlighted that his division is one person deep in most areas; however, there was other personnel available to act as representatives and make decisions. If the empowered representative does not have the appropriate knowledge and understand the strategic viewpoint, their decision can be detrimental (personal communication, February 4, 2019). The leader demonstrated the relationship-oriented behavior of empowering their subordinates but must also incorporate the action of developing their subordinates.

Organization A's leaders used both task-oriented behavior and relationship-oriented behavior in empowering their employees and the soldiers. Although leaders acknowledged employee empowerment as significant, it can be detrimental if the leader does not prepare the individual for the responsibility. The results indicated that employee empowerment was not as critical a factor in implementing GCSS-Army as management commitment and change management.

Leaders link ERP implementation with strategy. Spoehr (2015) posited that outstanding organizational performance starts with a good business strategy. However, before making a substantial investment into an ERP plan, Hwang and Min (2015) highlighted that the organization should examine whether an ERP implementation is an excellent strategic fit with its business strategy. Katerattanakul et al. (2014) noted there is a positive relationship between the success of the ERP system and the alignment of the ERP implementation and the company's business strategy.

The linkage between an ERP implementation and strategy was the least emphasized critical factor between participants. Participants 1, 2, 3, 7, and 10 addressed a fielding strategy, acquisition strategy, operations strategy, and an overall enterprise strategy respectively. Participant 1 noted the GCSS-Army fielding strategy was essential because it incorporated the different aspects of the Army ERP deployment (personal communication, February 28, 2019).

Participant 1 highlighted that the fielding strategy governed all of the significant events and support actions required to implement GCSS-Army on a military installation. The fielding plan provided a schedule of events to each military organization that was receiving GCSS-Army. By documenting that strategy with the other Army Commands, Organization A's leaders developed a plan for implementing the Army ERP at the Army Installation. The fielding strategy

allowed the military users to read the plan and ask questions and gave the Army unit the specific timeline for receiving GCSS-Army. Organization A's leaders coordinated the fielding strategy with the gaining military organization, and it facilitated the efficient and effective implementation of GCSS-Army. Participant 1 stated, "The worst thing that could happen was if we came to your site and were supposed to be there for 30 days and halfway through the process, the military unit receiving GCSS-Army had to deploy to an exercise" (personal communication, February 28, 2019). The military group receiving the Army ERP had to be dedicated to the ERP implementation. It was essential that the leader aligned the ERP fielding strategy with the organization's schedule.

Participant 2 noted that the acquisition strategy was a much more significant challenge. The current acquisition strategy was not sufficient, and the linkage between the acquisition strategy and the GCSS-Army implementation changed. Participant 2 described the acquisition strategy as a living document. Participant 2 noted that the acquisition strategy that Organization A entered milestone B with during the development of GCSS-Army was entirely different than the acquisition strategy for GCSS-Army now that it is in the sustainment phase. Additionally, the current acquisition strategy cannot be aligned with the original plan because the project has grown exponentially (personal communication, January 28, 2019).

Before GCSS-Army, Participant 3 highlighted that Organization A had never implemented an Army ERP into a military organization. Previous logistics information systems were custom code based upon Army regulation. The current Army processes included the military logistics processes that the Army units used to sustain logistics operations. However, the ERP software for GCSS-Army was commercial SAP software with processes not currently aligned with Army regulation. Initially, these processes were not appropriate for an ERP

implementation. Participant 3 stated, “There were a lot of growing pains going up to the Pentagon. We were trying to match what we had to do per regulation to the software. It was not a good fit” (personal communication, January 30, 2019).

Organization A’s leaders worked with SAP consultants to align the Army’s logistics processes of supply, property book and maintenance processes with SAP’s operations to create GCSS-Army. Participant 7 stated, “If the ERP implementation conflicts with the way the Army does business, you will have a problem” (personal communication, February 1, 2019). The consultants and Participant 7 played active roles in aligning the Army’s logistics process with the SAP software. Participant 7 and his team members described to the SAP consultants the capability that GCSS-Army needed, and the SAP consultants provided options to perform those tasks. For example, if the logistics process was receiving a repair part, the SAP consultants demonstrated the possibilities for obtaining a repair part in SAP, and the Army leaders would select the choice that they would adopt in GCSS-Army. If none of the options were acceptable, Participant 7 had the SAP consultants configure the SAP software differently. The relationship between the Army leaders and the SAP consultants worked well (personal communication, February 1, 2019).

Finally, Participant 10 noted that the Army needs an overall strategy for ERP implementations. Currently, the Army is implementing and managing the Logistics Modernization Program (LMP), Global Combat Support System-Army (GCSS-A), Army Enterprise System Integration Program (AESIP), and General Funds Business System (GFEBS). It is developing a fifth ERP called Integrated Personnel and Pay System-Army (IPPS-A). Participant 10 stated, “The Army needs to establish an overarching ERP strategy that would be

the defining document that everybody uses to develop and integrate the different Army ERPs” (personal communication, February 8, 2019).

Participant 8 noted that there were no standard business rules developed for Army ERP implementations that established how the Army configures and integrates these ERP solutions. Integration implies that the ERP system manages all relevant data for a particular business process across the enterprise. However, Organization A integrated GCSS-Army with GFEBS, and not the other ERP systems. Although LMP and AESIP use SAP software, these other Army ERPs use different standards and are not integrated with GCSS-Army. These other Army ERPs interface with GCSS-Army through middleware (personal communication, February 4, 2019).

Participant 8 noted that Organization A’s leaders continued to address the linkage between strategy and ERP implementations and the implication for an overall strategy. As additional capabilities are added to GCSS-Army, the Participant 8 recognized they had to align these changes with the plan of where GCSS-A is right now, or where the Army ERP will be in the future. Participant 8 noted that Organization A’s architects linked the changes to strategy because the architects understood that any future changes made to GCSS-Army would either support the current plan or create implications to meet future needs (personal communication, February 4, 2019).

Leadership style for an ERP implementation. Shao et al. (2016) divided the lifecycle phases of an enterprise system into adoption, implementation, and assimilation. The adoption phase presents a vision for the organization and states how the enterprise system can enable the vision. The implementation phase is about plan execution, conflict resolution, and project management. The final stage, assimilation, focuses on innovation, continuous learning, and constant improvement.

According to Participant 10, Organization A's leaders followed a traditional development methodology for GCSS-Army. Participant 10 identified the lifecycle phases of GCSS-Army as the development phase, deployment phase, and sustainment phase. Participant 10 explained that the method utilized to create GCSS-Army began with the development phase. In this phase, the developer planned and analyzed requirements to determine the capabilities that the ERP system needed. From the design, the developer created a prototype system for testing the ERP and ensured that the system worked. Following the development phase, the system moved into the deployment phase. In the deployment phase, Organization A's leaders implemented GCSS-Army at the military units on the Army installations (personal communication, February 8, 2019). In GCSS-Army, the leaders delivered the capability incrementally to the Army units through two waves. The final stage in the process was the sustainment phase. In this phase, Organization A's leaders looked to improve and continually extend the capabilities of GCSS-Army.

Given the different leadership challenges in the different phases of an ERP lifecycle, Shao et al. (2016) noted that a one-style-fits-all leadership approach was inadequate. According to Shao et al. (2016), transformational leadership fits best with the adoption phase of the ERP, while transactional leadership better supports the ERP implementation stage, and a combined transformational and transactional style is most effective in the assimilation and extension phases. Pantouvakis and Patsiouras (2016) indicated that transformational leaders are visionary and use various means to motivate and engage their followers to achieve the desired results. On the other hand, Pantouvakis and Patsiouras (2016) noted that transactional leadership is task oriented and accomplishes goals before rewards take place. Likewise, Rowold et al. (2015) determined that the relationship-oriented construct aligns with transformational leadership and

that the task-oriented perspective overlaps with transactional leadership. Shao et al. (2016) concluded that a variety of transformational and transactional leadership behaviors are most effective in the assimilation and extension phases of the ERP solution.

Shao et al. (2016) noted that the lifecycle phases of an enterprise system were adoption, implementation, and assimilation. These three phases highlighted by Shao et al. (2016), aligned with the lifecycle phases of development, deployment, and sustainment in GCSS-Army. During the development phase of GCSS-Army, Participants 2, 8, and 10 highlighted that the developer planned and analyzed requirements to determine the capabilities that GCSS-Army needed, SAP experts customized the software into GCSS-Army and integrated GCSS-Army with another system.

Therefore, in the development phase, Participant 10 noted that the Army ERP developer transformed the Army logistics processes through new capabilities. The developer demonstrated a transformational leadership style and envisioned the capabilities that the Army needed to meet future requirements. During the development phase of GCSS-Army, the GCSS-Army developer transformed the Army logistics from a functional perspective that focused on maintenance and supply separately, to a supply chain perspective that focused on the processes that integrated supply and maintenance. Through this change, Participant 10 noted that GCSS-Army was not a replacement system for the Standard Army Maintenance System (SAMS), the Standard Army Retail Supply System (SARSS), and the Property Book User Supply Enhanced (PBUSE), but was a logistics transformation in terminology, business processes, and policies (personal communication, February 8, 2019).

Since ERPs are very technical, Participant 2 noted that many of the personnel working in the development phase were skilled SAP experts. These experts were coding SAP software to

customize the software into GCSS-Army. Participant 2 emphasized that SAP experts needed leaders to support their efforts because custom coding is very labor intensive. If the SAP experts are forced to speed up the system development, there is more chance for error and to not develop a reliable system (personal communication, January 28, 2019). According to Shao et al. (2016), the relationship-oriented leader behavior of supporting the SAP expert aligns with the transformational leadership style.

Additionally, Participant 2 highlighted that there were not a lot of SAP experts that were willing to live near this Army installation in the Mid-Atlantic region to do development of GCSS-Army. Most personnel with these types of skills live in large cities, and many of the experts fly in during the week and fly home on the weekends. Participant 2 emphasized that it was critical to find the right SAP experts for the system development phase of GCSS-Army and retain them on the project (personal communication, January 28, 2019).

Participant 8 highlighted that the developer integrated the system design across the functional areas. The developer integrated GCSS-Army across maintenance, supply, property book, and finance. Participant 8 noted that rarely will change or new developments in one area not affect the other areas. Therefore, in the development phase, GCSS-Army's processes and procedures have to be fully integrated across the spectrum to make sure that the system does not unintentionally diminish other functionality as design changes are made (personal communication, February 4, 2019). Shao et al. (2016) noted that in the development phase of an ERP implementation, it was critical to clearly articulate a strategic vision for the ERP system and inspire the leadership team with the vision. Therefore, Shao et al. (2016) concluded that a transformational leadership style provided the most effective support and success in the development phase.

As GCSS-Army advanced through the lifecycle, it moved from the development phase into the deployment phase. However, Shao et al. (2016) highlighted that in the implementation phase, it was more important to overcome task-related conflicts among the different stakeholders and provide strong project management skills. Shao et al. (2016) concluded that a transactional leadership style would be more appropriate in the ERP deployment phase. During the deployment phase, the focus shifted to the user - the soldier in the Army unit and task-related issues such as cleansing and migrating data.

In the deployment phase, Participants 1, 6, and 7 highlighted that the leaders had to plan work priorities, monitor operations, and advocate change. Participant 6 noted that the Army unit receiving GCSS-Army cleansed the data that migrated from their legacy systems such as SAMS, SARSS, and PBUSE into GCSS-Army. It was essential that the military group migrated accurate information from the legacy systems into GCSS-Army (personal communication, February 1, 2019). If the Army unit transfers inaccurate data to GCSS-Army, it impacts every process and results in decreased readiness, late deliveries, missed schedules, increased waste, wrong inventory, and low productivity. Since this activity was critical, Participant 1 stated, “We monitored the operation to make sure all the relevant data that came over from the legacy system into GCSS-Army was relevant, serialization was accurate, and all the different I’s dotted, T’s crossed as it related to data” (personal communication, January 28, 2019).

As the GCSS-Army team continued to monitor data cleansing activities, the team also followed the status of prerequisite training. Each GCSS-Army user was required to participate in ten hours of prerequisite web-based training. This training focused on a GCSS-Army overview and GCSS-Army navigation. It was general information needed by any GCSS-Army user and prepared the user for instructor-led training. Participant 1 stated, “This prerequisite training was

vital because some of the terminologies had changed from the legacy systems. If the users were not familiar with the new terminology they would be lost in the instructor facilitated training” (personal communication, January 28, 2019). Within the final 30 days before fielding GCSS-Army to the Army unit, Organization A’s deployment team conducted instructor facilitated training with the unit leaders, soldiers, and staff. The instructor facilitated training focused on the critical GCSS-Army tasks that the user needed to perform for the army unit to be combat ready in maintenance and supply. Approximately 12 days before the Army unit implemented GCSS-Army, the organization stopped processing electronic requisitions to clear the financial transactions through the legacy system. Seven days before implementation, the group entered a blackout period for all automated sustainment activities as the data was converted from the legacy system to GCSS-Army.

During the deployment phase, the interaction between the leader and the soldier shifted to task-oriented behavior. The leaders monitored the data conversion and data cleansing operations and made sure the data was accurate. Additionally, the leader clarified the training requirements and tracked that the soldiers were completing the prerequisite training and preparing for the instructor facilitated training. During the deployment phase of the GSCC-Army, the leadership style shifted from a transformational style to a transactional style.

During the deployment briefings, the leaders focused on change-oriented behaviors and advocated for the change from the legacy system to GCSS-Army. Participant 7 highlighted that the leaders provided information for the need to change from the legacy logistics systems to GCSS-Army and encouraged the soldiers not to resist the change. Participant 7 stated, “We’re moving away from what you’re doing today for a reason. ERP is the wave of the future for the next 20-30 years. Do not resist. If you don’t change with it, you’ll go away” (personal

communication, February 1, 2019). During this GCSS-Army deployment briefing, Participant 7 used a transactional leadership style in directing and clarifying the soldiers' responsibilities as the Army moved from their legacy logistics systems to GCSS-Army.

Sustainment Phase of GCSS-Army implementation began at the Go Live date and will continue for the full life cycle of the system. Participants 1, 4, and 5 continued to support the soldier, provide assistance with problems, and develop continuous improvements. For the first month after going live with GCSS-Army, Participant 1 noted that Organization A's team members stayed with the unit and provided over the shoulder training and technical assistance. Additionally, GCSS-Army has an Electronic Performance Support System (EPSS) that assisted soldiers in using GCSS-Army for the life cycle of the system. The GCSS-Army EPSS is a form of Just-in-Time Training (JITT) that is available for the GCSS-Army user as they are performing a task in the operational environment. Participant 2 noted that the last Army unit to receive GCSS-Army entered the sustainment phase in November 2018 (personal communication, January 28, 2019).

Additionally, in the sustainment phase, GCSS-Army provides post-deployment software support through a help desk. Through the help desk, Organization A receives calls and emails from GCSS-Army users requesting assistance solving GCSS-Army problems and training issues. Functional experts in supply and maintenance guide GCSS-Army users through transactions and business processes. Participant 5 stated, "The calls from the soldier are mostly guidance calls. The soldier is saying that they do not know how to do something or they have forgotten how to do a transaction. So, the analyst walks them through the process" (personal communication, January 31, 2019). Additionally, the help desk receives recommendations from the soldier for

improving GCSS-Army. Organization A reviews and implements these functional improvements to the Army ERP.

Finally, in the sustainment phase, Participant 4 noted that Department of Defense Regulation allows for the continuous enhancements to the Army ERP to maintain the relevancy of GCSS-Army. Software systems are continually making adjustments and improvements to the system. Participant 4 highlighted that Organization A is going through a business system review and planning funding for FY 21 – 25 to continue to maintain the relevancy of GCSS-Army in the future (personal communication, January 30, 2019).

During the sustainment phase, the leader utilized both a transformational and transactional leadership style. In this example, the leader used problem-solving behavior to answer the soldier's questions which represents a transactional leadership style. However, the leader used a transformational leadership style for promoting functional improvements to GCSS-Army.

Leader education and experience for an ERP implementation. Garg and Khurana (2017) noted the leadership should provide the ERP implementation group with experienced members from the organization, vendor's team members, technical and functional experts, and that an experienced project manager should lead the group. However, assembling an adequately equipped ERP implementation team is a significant challenge. Participant 5 noted that it was difficult finding qualified people that have the education and experience to implement an Army ERP system. Participant 5 stated, "ERP implementations are hard. It would be wonderful to be able to go out and pick somebody that knew something about the military and also had some ERP experience. I don't see where you go to find those people" (personal communication,

January 31, 2019). To address this challenge, Participants 4, 7, and 10 noted that Organization A must develop, support, and retain quality leaders and technicians.

The Army develops leaders and technicians through education and experience to accomplish their mission. Participant 4 noted that the Army believes in educating its members and that the participants' education and professional experience contributed immeasurably to their success in implementing GCSS-Army. Participant 4 stated, "I'm fortunate that I work for an organization that believes in educating its members" (personal communication, January 30, 2019).

Participant 7 highlighted that each person does not have to know everything about an ERP. Organization A is a team made up of members with various military experiences and education. Participant 7 stated, "Education and experience are priceless. When Organization A created our team, it was all top-level performers, and it paid off handsomely. You have to have quality folks" (personal communication, February 1, 2019).

Participant 7 emphasized that quality people with an education and experience are critical to an ERP implementation. Therefore, consistently losing personnel from the implementation team should be minimized. Garg and Garg (2013) highlighted that attrition from the implementation should be kept to a minimum to prevent delays in the ERP implementation. Additionally, implementation delays increase the demands for resources and challenges for completing the ERP changeover.

Participant 10 highlighted that senior leaders are routinely changing positions was one issue that complicated the implementation of GCSS-Army. It is standard procedure that Army personnel rotate out of their current duty assignment every three years. Since the lifecycle of GCSS-Army's development and deployment spanned from 2004 through 2017, there were over

five lead changes during the GCSS-Army implementation. Likewise, in the military units receiving GCSS-Army, the soldiers transferred in and out of their Army unit. Participant 10 noted that soldier transfers occurred between one to two times from the period that Organization A started the GCSS-Army implementation to the point that it finished. This phenomenon was referred to as an Army in Motion. Participant 10 stated, “Maybe the Army needs to have a portion of the force that stays constant so that you minimize turbulence during the ERP implementation” (personal communication, February 8, 2019). Since the education and the experience of the Army ERP team members are essential to a successful ERP implementation, rotation of the team member from their respective role needs to be minimized during the entire ERP process to maximize the value of the members’ experience and education.

How the findings relate to the conceptual framework. The researcher built the conceptual framework for this study upon the knowledge that leadership is a process that can be learned rather than inherited. Subsequently, the researcher interpreted the findings of this study through the view of the study’s conceptual framework. There is a correlation between leader behaviors and organizational outcomes (e.g., successful implementation and sustainment of an ERP solution), and the behavioral leadership approach guides the conceptual framework. Additionally, the leaders who participated in this study recommended several leader behaviors.

Conceptual framework. The researcher built the conceptual framework for this study upon the knowledge that leadership is a process whereby the leader influences and facilitates individual and collective efforts to accomplish a shared objective (Yukl, 2012). According to Yukl (2012), over a half-century of research provides the support that leaders can enhance the performance of their organization through their behaviors that are relevant to the situation. This behavioral approach to leadership resulted in the development of the behavioral leadership

theory. The advantage of this approach is that leaders can learn these behaviors. Sampayo and Maranga (2015) noted that scholars based the behavioral leadership theory on the belief that leaders can be developed, and are not just born with inherent leadership characteristics. Therefore, this approach focused on the leaders' actions, and not on their mental qualities, personality traits, or capabilities.

Al-Haddad and Kotnour (2015) noted that change had become the norm for organizations to sustain their success and existence. Therefore, industrial and governmental organizations are continually striving to align their operations with a changing environment. Kotter (1996) promoted a change method that allowed organizations to avoid failures in implementing change and increasing their chances of success. Kotter's eight-step approach established a sense of urgency by relating the change to real potential crises, building a team trusted to support the change, having a vision and strategy, communicating the vision, implementing the change and planning short-term wins, consolidating the gains and constantly institutionalizing the change. Similarly, Spector (2013) noted that creating dissatisfaction with the status quo is the first step in implementing change. Second, members of the organization must move from one set of behaviors to another, and these new behaviors must become permanent for the desired period. Finally, the final stage in implementing change is to institutionalize the different pattern of actions into a new status quo.

Since the purpose of this study was to understand the relationship between leader behavior and ERP implementation better, the behavioral leadership theory and change theory were the foundation for this study. The research questions for this study were:

1. What are the specific leadership behaviors required to complete an ERP implementation at an army installation within the Mid-Atlantic region?

2. How do the leader's education and experience contribute to a successful ERP implementation?
3. How does the leader's leadership style influence a successful ERP implementation?

Additionally, the purpose of this research was to prepare better military officers and civilian leaders for implementing an Army ERP system by communicating desired leader behaviors.

The central theme of this study was that the behavioral approach to leadership is essential to the study of leader behavior and ERP implementation. Yukl (2012) incorporated behavior into the four meta-categories of task-oriented, relationship-oriented, change-oriented and external. Additionally, Yukl (2012) identified 15 leader behaviors associated with these four meta-categories. The task-oriented behaviors are clarifying, planning, monitoring operations, and problem-solving. The relationship-oriented behaviors are supporting, developing, recognizing, and empowering; the change-oriented behaviors are advocating change, envisioning change, encouraging innovation, and facilitating collective learning; external behaviors are networking, external monitoring, representing.

Relationship of findings to the conceptual framework. Li et al. (2016) noted that leadership and top management support are the most crucial success factors in ERP implementation. All of the leaders in Organization A stressed the importance of leadership and specific relationship-oriented, task-oriented, change-oriented leader behavior in successfully implementing an Army ERP. Participants 3 and 4 noted that leaders lead by being involved. The leader cannot sit in their office; they must demonstrate task-oriented behavior and monitor operations. The leader observes the activities of their team and receives feedback from the team members. This interaction with team members allows the leader to exhibit relationship-oriented behavior in coaching and developing their employees. Participant 3 stated, "I don't sit in my

office, I go out and see what's going on. I am teaching these guys that it's not us versus them.

We're on the same team. If they fail, we fail" (personal communication, January 30, 2019).

Within Organization A, there are military officers, civilian personnel, and contractors. All of the players are on one team working for the common goal of a successful GCSS-Army implementation.

Other leaders expressed the idea of leading by walking around. Participant 4 demonstrated task-oriented behavior by observing actions and relationship-oriented behavior supporting and carefully listening to the team. Participant 4 stated, "Leadership is dealing with people. It is about employee empowerment, trust, and listening. People want you to listen to them and hear their ideas. I lead by walking around and asking people for their opinion and feedback" (personal communication, January 30, 2019). Both Participant 3 and Participant 4 promoted relationship-oriented behaviors such as supporting, developing, recognizing, and empowering. These leaders also demonstrated task-oriented behavior by observing operations.

Other leaders were more focused on task-oriented behaviors such as problem-solving, clarifying, and planning. These leaders focused on correcting any disruption to the objective of implementing GCSS-Army and adjusting priorities to meet those objectives. Participant 9 stated, "I've supported the military my whole career. I come from the perspective "we need to fix it, we need to fix it right, and we need to do it now. If you don't support that soldier, you don't have a job" (personal communication, February 5, 2019).

Participants 6 and 9 revealed other examples of a leader demonstrating the task oriented-behavior of clarifying. The leader set the performance standards, explained the work priorities and assigned tasks. Participant 6 stated, "I'm an aggressive leader. I am a take-charge leader. I believe in laying all the cards on the table. That is the approach I used with the Army leaders

receiving GCSS-Army” (personal communication, February 1, 2019). Both Participant 6 and Participant 9 exhibited task-oriented behaviors such as clarifying, problem-solving, monitoring operations and planning.

Finally, Participants 1, 6, and 7 demonstrated change-oriented behavior in relation to the conceptual framework. Organization A’s leaders provided change-oriented behavior by advocating change and giving information to the GCSS-Army users that showed the need to change from the legacy system to GCSS-Army. The leaders noted the consequences if the soldiers did not make the change. Participant 7 stated, “I know that many fear that their job is going away. No, your role will evolve. If you don’t change with it, you’ll leave. Your position will remain, but somebody willing to develop into the future will fill it” (personal communication, February 1, 2019). Participant 1 noted that they changed the soldiers’ mindset about how the Army operates. Once the soldiers recognized that GCSS-Army worked, they accepted the Army ERP system (personal communication, January 28, 2019). Participant 6 noted that the Warrant Officers and senior Noncommissioned Officers (NCOs) were more resistant to GCSS-Army than the younger soldiers (personal communication, February 1, 2019). Many of the Warrant Officers and Senior NCOs did not think it was possible to bring all of these legacy systems, such as SAMS, SARSS, and PBUSE into one ERP system. The leaders advanced GCSS-Army by developing a change management plan, disrupting the status quo, and facilitating collective learning of the new system.

Interestingly, the senior leaders in Organization A displayed relationship-oriented behavior, task-oriented behavior, and change-oriented behavior. There is a need for all three types of leader behavior in an ERP implementation. As noted previously, Rowold et al. (2015) determined that the relationship-oriented construct aligns with transformational leadership and

that the task-oriented perspective overlaps with transactional leadership. Shao et al. (2016) noted that transformational leadership fits best with the development phase of the ERP implementation, while transactional leadership supports the deployment stage of the ERP implementation. Shao et al. (2016) concluded that both transformational leadership and transactional leadership have a role in the sustainment phase. Having both leadership styles and the three categories of leader behavior in Organization A was beneficial to all stages of a successful ERP implementation at an Army installation.

Applications to Professional Practice

The researcher utilized the following research questions in this study:

1. What are the specific leadership behaviors required to successfully complete an ERP implementation at an army installation within the Mid-Atlantic region?
2. How does the leader's education and experience contribute to a successful ERP implementation?
3. How does the leader's leadership style influence a successful ERP implementation?

This main sub-section provides a detailed discussion on the applicability of the findings to the professional practice of business leadership. This section details why and how the results are relevant to implementing an ERP in an Army organization. Additionally, the researcher discussed the implications for the findings regarding the Biblical framework and the academic field of leadership.

How leaders utilize specific behaviors to implement an ERP. Researchers in other ERP implementations noted that leader behavior supportive of management commitment and change management was instrumental in successfully implementing an ERP system (Ali & Miller, 2017; Coeurderoy et al., 2014; Abbasi et al., 2014). Additionally, Basu and Bhola (2016)

cited management support, employee empowerment, communications and strategy as critical in an ERP implementation. Likewise, the researcher found that the leaders in Organization A supported this proposition.

In this case study, the researcher found that management commitment, change management, communication, employee empowerment, and linkage to strategy were critical factors in an ERP implementation. More importantly, the researcher found that the leader demonstrates their leadership through their behavior. Organization A's leaders strongly indicated that leader behaviors must include management commitment and change management in an ERP implementation. Interestingly, while all of the leaders recognized the importance of communication, it was regarded by some as a part of change management and management commitment. Similarly, the leaders realized that employee empowerment was important. However, some perceived that it was an outcome of the ERP implementation. Other leaders noted that employee empowerment could be detrimental if the leaders did not prepare their employees for the responsibility. Organization A's leaders highlighted that linkage to strategy was the least important of the five factors during the ERP implementation on an Army installation.

The researcher found that the leaders described the linkage between the ERP implementation and strategy from multiple perspectives. These perspectives were a fielding strategy, acquisition strategy, operations strategy, and an overall enterprise strategy. The leaders emphasized that the fielding strategy was essential during the deployment phase. The leaders highlighted that the acquisition strategy was a challenge because it changed from the development phase into the sustainment phase of the ERP implementation. The leaders indicated

that they established the operations strategy in the development phase. Additionally, one leader pointed out that the Army needed an overarching ERP strategy.

Leaders must lead through their behavior. The central theme that the leaders revealed during the examination of Organization A was that leaders must lead the ERP implementation at an Army installation through their actions. Whether addressing the issues of management commitment or change management, the leaders emphasized the need for leader involvement in the ERP implementation. Participant 1 summarized the idea this way, “If the military leader got involved, the soldiers were involved, and the ERP implementation went well” (personal communication, January 28, 2019).

The focus on leadership through behavior strongly supports the behavioral theory of leadership. Yukl (2012) noted that the behavioral approach explains how leaders combine task-oriented behavior, relationship-oriented behavior, change-oriented behavior and external behavior to influence followers to accomplish a goal. The leaders in Organization A demonstrated task-oriented behavior, relationship-oriented behavior, change-oriented behavior, and external behavior at the various phases of the GCSS-Army implementation on the Army installation.

The leaders in Organization A noted that the leader could not delegate their responsibilities. Although a leader may delegate a task to save time or to develop a subordinate to perform a task, the leader cannot transfer their responsibilities in an ERP implementation. The leader must stay engaged and make sure the task is completed correctly in the ERP implementation.

Second, the leaders in Organization A highlighted that the leader must find time to fulfill all of their responsibilities. Therefore, the leader has to establish priorities and determine which

duties are most important for the leader to complete, which functions the leader can reduce, or which tasks the leader can eliminate. If requirements cannot be reduced or eliminated, the leader increases the amount of time that they spend at work. Setting priorities and managing time is a real consideration for a leader implementing an Army ERP.

The leaders noted that their actions must be honest. The soldier can quickly perceive if the leader's actions for implementing the Army ERP system are truthful or insincere. Participant 5 stated, “You’ve got to be perfectly honest with them and tell them, GCSS-Army was not built to make your life easier. Once you’re honest with them, it makes the ERP implementation much easier” (personal communication, January 31, 2019). Therefore, the leader must do some introspection and make sure they genuinely believe in the ERP implementation.

Leaders demonstrate commitment. Organization A’s leaders noted that commitment is more than just saying that the ERP implementation is essential. The leaders must set the example by demonstrating through specific actions and behavior that they are actual participants in the ERP process. Participant 1 described this by stating, “If the soldiers saw their leaders sitting in the classroom taking good notes during GCSS-Army training, then they were in the classroom taking good notes” (personal communication, January 28, 2019). The researcher found that leaders’ commitment increased their soldiers’ commitment and improved the Army ERP implementation. Therefore, Army leaders should prioritize their commitment in an ERP implementation because it positively influences the soldier receiving the Army ERP system.

Leaders in Organization A credited much of their success in implementing GCSS-Army with establishing and monitoring priorities with the leaders in the Army organization receiving the Army ERP. Organization A’s leaders utilized task-oriented behaviors such as planning, organizing, and monitoring the schedule of priorities from cleansing data to the soldiers’

completion of web-based training. The researcher found that four months before the ERP deployment, Organization A's leaders visited the site each month and monitored the status of each task. After the GCSS-Army deployment, Organization A's fielding team stayed with the Army unit providing over the shoulder training and technical assistance. Fulfilling the ERP implementation priorities were crucial to a successful operation. Therefore, the leaders' involvement in setting, monitoring, and completing each task was instrumental in the implementation succeeding.

Organization A's leaders also demonstrated management commitment through allocating resources for training. Almajali et al. (2016) noted that management must provide funding for worker training because user training was essential in an ERP implementation. The researcher found that Organization A resourced a robust Electronic Performance Support System (EPSS) to assist soldiers in using GCSS-Army for the life cycle of the system. Additionally, all training materials were available online. The leaders in Organization A noted that allocating resources for the training and soldier assistance expedited the Army ERP implementation on the Army installation. The leaders noted that these training resources effectively solved the soldiers' issues; saving time and money. This finding is supported by Garg and Garg (2014) who concluded that ERP training saves the organization time and money.

Organization A's leaders resourced the capability to monitor an Army unit's operation of GCSS-Army and evaluate the process and identify what mistakes a soldier was making using the Army ERP. The researcher found that based on Organization A's evaluation, the leaders developed a specific training package to address the user's needs. The leaders sent a training team to the user's location and discussed the particular GCSS-Army issues. Participant 7 noted the user's response to this targeted training, "They came in somber, and they walked out with a

broad smile. The user stated, “You’ve done what we need, what we asked” (personal communication, February 1, 2019). Organization A’s leaders contributed to the readiness of the user organization by demonstrating the behavior of monitoring operations and problem-solving.

Furthermore, the leaders demonstrated relationship-oriented behavior by supporting and developing the soldier. The leaders noted that they increased the user’s confidence in GCSS-Army by developing and supporting the soldiers. The researcher found that the leaders improved the soldier’s confidence in the Army ERP by training the soldiers and demonstrating to the soldiers that GCSS-Army worked. Other business researchers have reinforced this conclusion. Almajali et al. (2016), Shao et al. (2016), and Garg and Garg (2014) highlighted that training develops a confident workforce, and creates a clear understanding of the ERP system.

Leaders lead change management. Pishdad and Haider (2013) posited that if a leader did not consider change management and adequately prepare the organization for the changes, the ERP implementation would fail. The leaders in Organization A noted the importance of change management. Participant 7 stated, “You can’t do enough with change management” (personal communication, February 1, 2019). Leaders lead change by advocating change, understanding resistance, and understanding the level of change.

The researcher found that change management began well before the Army organization received GCCS-Army. Six months before the Army unit received GCSS-Army, Organization A’s leaders conducted town hall events to explain the need for the Army ERP to the commanders and soldiers. The leaders emphasized the Army was changing and moving away from the functional logistics systems to an integrated ERP. Organization A’s leaders exhibited the change-oriented behaviors of advocating change and encouraging innovation within the Army organization. Spector (2013) noted that the leaders, through their actions, sought to motivate

employees to change their behavior but not to force, coerce, or trick the soldier into changing. Therefore, the Army leaders should prioritize change management in an Army ERP implementation at an Army installation.

Organization A's leaders noted that the Warrant Officers and senior Noncommissioned Officers (NCOs) were more resistant to GCSS-Army than the younger soldiers. Spector (2013) noted that study after study had refuted the idea that older workers are more likely to resist change than younger workers. The leaders tried to understand the reasons behind the soldiers' resistance to change. Likewise, Organization A's leaders learned that the Warrant Officers and Senior NCOs did not think it was possible to bring all of these legacy maintenance, supply, and property book systems into one ERP system. Spector (2013) highlighted that employees resist because they believe that the change effort is not likely to succeed. The researcher found that the leaders implementing change expected a range of response, from full support to determined opposition. Organization A's leaders understood the resistance to change allowed them to correctly display the change-oriented behavior of encouraging innovation and creating a climate of trust in suggesting new ideas. Participant 7 noted that one soldier stated, "I was at your briefing on GCSS-Army several years ago, and I said that it would never work. And I can tell you today that I was wrong" (personal communication, February 1, 2019). Army leaders should acknowledge that resistance is an opportunity for leaders to learn.

Organization A's leaders stated that it was essential that the leader understands the level of change that they are managing. Spector (2013) defined transformational change as a change to achieve a significant and sustainable impact on performance, which must focus on altering patterns of employee behavior. The researcher found that the recipients of GCSS-Army did not understand that the Army ERP was a transformation, but they thought it was a turnaround that

looked at company assets and sought to manage them more effectively. Participant 10 stated, “They looked at it as a SARSS replacement, SAMS replacement, a PBUSE replacement. Although we said this is the most significant change in the United States Army” (personal communication. February 8, 2019). Because some of the commands receiving GCSS-Army did not understand that the Army ERP was a logistics transformation, they were not as involved as they needed to be. Therefore, Organization A’s leaders must exhibit the change-oriented behavior of envisioning change and ensure that they articulate a clear vision so the receiving unit understands the category of change.

Leaders communicate. Organization A’s leaders all agreed that excellent communication was essential and that leaders were instrumental in good communication. The researcher found two types of communication within an ERP implementation; enterprise-wide communication, and interdepartmental communication. Garg and Garg (2014) and Gavidia (2016) noted that enterprise-wide communication was one of the most significant factors for a successful ERP implementation. Bintoro et al. (2015) indicated that interdepartmental cooperation was essential for understanding and approving the ERP implementation and sharing information between the project team and the organization regarding the results and the goals during each stage of the ERP implementation. Therefore, both types of communications were critical, and the leader needed to distinguish between the two because the associated leader behaviors differ.

The researcher found that enterprise-wide communication crossed organizational boundaries and spanned the enterprise, from the soldier to commercial suppliers and manufacturers to other military services to the Department of the Army. During enterprise-wide communications, Army leaders should prioritize the task-oriented behaviors of clarifying task

and priorities and monitoring operations by evaluating reports and performance. Since enterprise-wide communication spanned organizational boundaries, Organization A's leaders exhibited the external behavior of representing GCSS-Army and requesting the appropriate resources from the Department of the Army. Participant 4 noted that Organization A is seeking funds from the Department of the Army for 2021 through 2025 to maintain the relevancy of GCSS-Army (personal communication, January 30, 2019).

The researcher found that interdepartmental communications involved sharing information between the project teams regarding the results and the goals during each stage of the ERP implementation. Participant 9 noted that the continuity of information that flowed within Organization A allowed the team to solve issues within minutes (personal communication, February 5, 2019). Therefore, Organization A's leaders utilized more relationship-oriented behaviors such as supporting the needs of the team members with interdepartmental communication.

Leaders should display task-oriented behavior and external behavior during enterprise-wide communication. However, leaders should exhibit relationship-oriented behaviors during interdepartmental communication. Therefore, Army leaders must understand the difference between the two types of communications because each kind of communication requires a different type of leader behavior.

Leaders facilitate employee empowerment. Organization A's leaders acknowledged the need to display behaviors that promoted employee empowerment. The researcher found that Organization A's senior leader leveraged their employees' experience and education through employee empowerment. Participant 5 noted that the top military leader in Organization A changed every couple of years. Therefore, the senior army leader empowered the civilian leaders

and employees because they have continuity in the organization and more experience with the GCSS-Army implementation. Thus, Organization A's senior leader empowered the civilian leaders and employees because it was critical to successfully implementing GCSS-Army.

Organization A's leaders noted that they could empower employees by listening to them. Participant 4 highlighted that the best ideas for changing GCSS-Army came from the soldiers who were using the Army ERP system. If the soldier believed the leader was listening to them, this empowered the soldier to contribute to the sustainment of the Army ERP system. Therefore, Army leaders should listen to their employees to capture their best thoughts.

Additionally, the leaders empowered the soldier in the GCSS-Army implementation through the lead user program. This program identified outstanding soldiers in the Army organization receiving GCSS-Army and Organization A's leaders provided them with advanced training in the Army ERP system. The researcher found that these soldiers returned to their Army unit and were empowered to be champions for GCSS-Army and facilitated the soldiers' acceptance of the Army ERP. Therefore, Army leaders should enable the lead user program because it empowers soldiers and facilitates change management for the Army ERP implementation.

Organization A's leaders acknowledged the importance of employee empowerment. The researcher found that the common thread in successfully empowering employees was that the leaders properly trained their employees for the empowered responsibility. Participant 8 noted that sometimes leaders empowered their people and enabled them to make decisions, but the leader had not prepared the employee with the necessary knowledge and proper perspective to properly manage the responsibility, and the employee made inappropriate decisions. Therefore,

Army leaders should empower their employees but prioritize the employee training, so that the leader prepares the employee for the responsibility.

Leaders utilize a strategy. Katerattanakul et al. (2014) noted there was a positive relationship between the success of the ERP system and the alignment of the ERP implementation and the company's business strategy. While Organization A's leaders did not disagree, the linkage between an ERP implementation and strategy was the least emphasized critical factor between participants. Participant 10 noted that the Army needed an overall strategy for ERP implementations (personal communication, February 8, 2019). Currently, the Army is implementing and managing the Logistics Modernization Program (LMP), Global Combat Support System-Army (GCSS-A), Army Enterprise System Integration Program (AESIP), and General Funds Business System (GFEBS). It is developing a fifth ERP called Integrated Personnel and Pay System-Army (IPPS-A).

Although each of these Army ERPs used SAP, the researcher found that the experts developed the Army ERPs with a custom code application. Each ERP program developed their respective Army ERP with a local strategy. Except for GCSS-Army and GFEBS, Participant 2 noted that all of the Army ERPs communicated through middleware instead of an integrated platform. The cost to convert all of the ERPs to a common platform was estimated to cost over \$5 billion (personal communication, January 28, 2019). Participant 10 stated, "The Army needs to establish an overarching ERP strategy that would be the defining document that everybody uses to develop and integrate the different Army ERPs" (personal communication, February 8, 2019). Participant 2 also noted that being able to expand the capabilities across the entire enterprise would be a great idea (personal communication, January 28, 2019). Therefore,

Organization A's leaders highlighted that an overarching ERP strategy would assist the Army in expanding the enterprise to incorporate additional capability.

Leaders seek education and experience. Garg and Khurana (2017) noted that leaders should provide an ERP implementation team with trained and experienced members. The researcher found that part of the leaders' experience was learning from their mistakes. Participant 5 noted that if a leader made a mistake, that was okay, but the leader must learn from their mistake (personal communication, January 31, 2019). Leaders must embrace this behavior, and grow from their mistakes. Organization A's leaders highlighted that the ERP implementation was a more challenging process when the leader got visibly angry when errors occurred or blamed other leaders or employees. Therefore, Army leaders must continue to seek education and experience.

Leaders also grow by mentoring and coaching other personnel. A leader must train and develop other subordinate leaders and employees in the organization. Underhill, McAnally, and Koriath (2007) noted that coaching is instrumental in retaining leaders and talented employees. The researcher found that it was difficult finding qualified people to implement GCSS-Army. Participant 5 indicated that qualified people with the education and experience to implement an Army ERP system were challenging to find (personal communication, January 31, 2019). Therefore, Army leaders should mentor their employees to develop and retain a qualified ERP implementation team.

Organization A's leaders noted that an Army ERP implementation required the leaders to have more knowledge than was needed to implement a legacy system. GCSS-Army required the leader to understand all of the business functions incorporated in the ERP and have a systems perspective that integrated supply, maintenance, property book, and finance. The researcher

found that the functional legacy system only required the leader to understand the one logistics function performed by that system. Additionally, changes to the legacy system were isolated to the one system. However, the leaders highlighted that the Army ERP system impacted all the business functions and changes were not isolated to one Army ERP system. Participant 8 noted that leaders must understand the system perspective of an integrated ERP and recognized that changes in the GCSS-Army might impact the other Army ERP systems (personal communication, February 4, 2019). Therefore, Army leaders should understand all of the Army logistics functions and have a systems perspective to understand how a change in one Army system effects another Army system.

Leadership style in an ERP implementation. Given the different leadership challenges in the different phases of the ERP lifecycle, Shao et al. (2016) noted that a one-style-fits-all leadership approach was inadequate. According to Shao et al., transformational leadership fits best with the development phase of the ERP, while transactional leadership better supports the ERP deployment stage, and a combined transformational and transactional style was most effective in the sustainment phases. Rowold et al. (2015) highlighted that the transformational leadership style aligned with the relationship-oriented behaviors and the transactional leadership style aligned with the task-oriented behaviors.

The leaders in Organization A assigned different leaders to be in charge of various phases of the ERP implementation. The researcher found that in the development phase of GCSS-Army, the leaders exhibited more relationship-oriented behavior. While in the deployment phase, the leaders used more task-oriented behavior. Therefore, an Army leader with reliable task-oriented attributes may be the best leader to deploy the Army ERP implementation. Meanwhile, a leader with better relationship-oriented behavior may be the best leader for the

development of the Army ERP system. The sustainment phase is likely better for a leader with a combination of relationship-oriented and task-oriented behaviors. Therefore, Army leaders should consider the most appropriate leader for each specific stage of the ERP implementation based on the leader's specific leadership behavior.

Although different leaders may be responsible for the various stages of the Army ERP implementation, the leaders in Organization A noted that it was possible that one senior leader could provide effective leadership throughout the entire ERP lifecycle by exercising different or combined leadership styles. The researcher found that some leaders in Organization A demonstrated both relationship-oriented behavior and task-oriented behavior. Participant 4 defined his leadership style with the term of servant leadership, noting that his style was directive at times and participative at other times (personal communication, January 30, 2019). Therefore, Participant 4 exercised a combination of leadership behaviors from task-oriented behavior to relationship-oriented action to lead the Army ERP implementation.

Biblical framework. The Biblical framework for this study focused primarily on the Biblical view of the leader and the leader's behavior. Distinct features of the Biblical perspective were commitment, change management, leader development, and Biblical leadership principles. It is essential that the findings in this study aligned with the Biblical framework.

Commitment. The Biblical viewpoint on commitment was an element of the Biblical framework for this study. Jesus said to his disciples, "Whoever wants to be my disciple must deny themselves and take up their cross and follow me. For whoever wants to save their life will lose it, but whoever loses their life for me will find it" (Matthew 16:24-25 New International Version). These living words still call us to action today. Jesus requires total commitment from his followers. However, no one will make this type of commitment to a leader unless that leader

has made that type of commitment themselves. It is unreasonable for leaders to expect to get more commitment from a follower than they are willing to give to a follower.

Habakkuk described commitment this way, “Though the fig tree does not bud and there are no grapes on the vines...I will rejoice in the Lord; I will be joyful in God my Savior” (Habakkuk 3:17-18 New International Version). The critical point to Habakkuk’s statement is that he will maintain his attitude regardless of payback. Habakkuk’s statement defines what commitment is. The statement, “I will be committed if” is not a commitment; it is deal-making. Leaders must identify what is within their organization that is worthy of engagement. In this study and in other research, the number one factor highlighted in a successful ERP implementation is management commitment. The Biblical definition requires leaders not to ask how we get commitment but to what we are committed.

Change management. The Biblical perspective on change management was also a part of the Biblical framework for this study. Somehow we all have an aversion to change, mainly when things are going well. However, change is an integral component of growth. The Scriptures focus more on the process than the product because all believers are in the process of becoming the people God intended them to be. Therefore, growth is impossible without change.

Change is inherent in leadership. Through a vision to Peter, God introduced organizational change management into the Jewish church at Jerusalem by urging them to embrace the Gentiles. God told Peter to get up and kill the unclean animals and eat. But Peter resisted and said he had never tasted anything unclean. God responded and told him not to call anything He made unclean (Acts 10:13-15). God allowed Peter to resist and gave Peter time to adapt to the change. Finally, Peter recognized the improvements the change brought. Peter said, “So if God gave them the gift he gave us who believed in the Lord Jesus Christ, who was I to

think that I could stand in God's way?" (Acts 11:17 New International Version). God gave Peter a vision to bring the Jewish and Gentile believers together; therefore, Peter became the champion for change in the church.

God modeled some critical principles of organizational change when he integrated the exclusively Jewish church with the Gentiles. Therefore, leaders help others recognize the need for change and drive change. Similarly, leaders implementing an ERP help others see the need to change. GCSS-Army integrated the Army's logistics processes into one system, and this change increased the readiness of the Army unit.

Leader development. The Bible's timeless leadership principles also provide a guide for developing leaders. The researcher aligned this study with the behavioral approach to leadership; it focused on the leader's behavior, and that the leader can cultivate these behaviors. The apostle Paul highlighted that the leader development process was a combination of education, experience, and mentoring.

According to (Acts 16:1-3), Paul asked Timothy to accompany him on his journey because he had a good reputation among the believers in Lystra. However, since Timothy was young and immature in his faith, Paul directed Timothy on what to do. Paul's first stage of development was education and training. Paul taught Timothy what to do. After a while, Timothy was ministering with Paul. Luke writes that Paul and Timothy delivered the decisions of the apostles for the people to obey (Acts 16:4).

During the next phase, Paul sent Timothy on a specific task and developed Timothy's ability to work independently. In this phase, Paul helped Timothy to gain experience. Paul sent Timothy to the church at Phillipi to continue to gain knowledge but to also check on the welfare

of the members of the church at Phillipi. Growth occurred while Timothy was gaining experience; however, Paul continued mentoring Timothy in his development.

Paul understood the crucial role of mentoring in leadership development. He reminded the Thessalonians that he had done more for them than give them spiritual truth. Paul set an example for them, and those who followed in Paul's steps were also following Christ's footsteps. Paul wrote, "You became imitators of us and the Lord" (1 Thessalonians 2:6 New International Version). It is important to note that the chain did not stop with the Thessalonians. Paul stated, "And so you became a model to all the believers in Macedonia and Achaia" (1 Thessalonians 2:7 New International Version). Finally, Paul left Timothy to pastor the church at Ephesus (1 Timothy 1:3), and later Paul encouraged him to develop other leaders with the same process he had been prepared (2 Timothy 2:2)

Biblical leadership principles. The Bible contains timeless leadership principles for leaders to follow. The integration of these Biblical principles with the findings of the study of leader behaviors and ERP implementation revealed several inspiring points. Most prominent was the servant leadership of Jesus, the systems thinking of Paul, the effective communication of Isaiah, and Moses' ability to learn from his mistakes.

Interestingly, there was an alignment between Biblical leadership principles and the leadership principles involved in implementing an ERP. The researcher found that the leader who applies Biblical leadership principles would do well implementing an ERP system. The leader that follows the Biblical tenets of leadership would display the behaviors of servant leadership, systems thinking, effective communication, and learning from mistakes; which are trademarks for the complete leader implementing an ERP.

Servant leadership. Many times, leadership skills are used for personal gain and career advancement rather than in service for others. Through the life and ministry of his Son, God himself demonstrated that leadership is intended to serve others. Isaiah prophesied that Jesus, God's own Son would be the suffering servant. Isaiah wrote, "Surely he took up our pain and bore our suffering" (Isaiah 53:4 New International Version). The night before the Romans crucified Jesus; He demonstrated his servant leadership by washing the feet of his disciples. Jesus said, "Now that I, your Lord and Teacher, have washed your feet, you also should wash one another's feet. I have set you an example that you should do as I have done for you" (John 13:14-15 New International Version). The Lord did not tell them to become full-time foot washers and to do "what" he had done. Instead, he was telling them to be full-time servers of men and women and to do "as" he had done. Interestingly, this idea of servant leadership was used by some of the participants in the study when describing leader behavior in an ERP implementation. The leader implementing an ERP on a military installation applies this concept not only by serving others in their organization or on their team, but also helping and supporting the soldier that is receiving the ERP system.

Systems thinking. A skilled leader demonstrates that every part of a system is essential. Paul used an analogy of the body to describe how everyone is important and has a specific role. Paul wrote, "If they were all one part where would the body be? As it is there are many parts, but one body. The eye cannot say to the hand; I don't need you!" (1 Corinthians 12:19-21 New International Version). Paul's idea had nothing to do with human anatomy. Paul wanted to ensure that every follower of Christ felt significant and that their contribution was essential. We may wish that others were different, but God has created each of us with our unique skills and talents to serve. As leaders in an ERP implementation, we should view each person in the

organization or team as a crucial part of the system, and help each person discover their role and talents. A key element in an ERP implementation was understanding the system perspective. Several participants in the study discussed the necessity of a systems perspective in an ERP implementation. Many times people at other locations or in other organizations make decisions that have a tremendous impact on your organization.

Communication. The writer of this proverb noted that effective communication was more than speaking and listening, but it requires understanding. He wrote, “Fools find no pleasure in understanding but delight in airing their own opinions” (Proverbs 18:2 New International Version). Speaking and listening are a means, not an end. Someone who feels better because they “spoke their mind” or they think they fulfilled their obligation because they “heard him out” are inadvertently communicating the wrong message. God warned Isaiah that he would face similar communications problems in his ministry. God said, “Go and tell these people: Be ever hearing but never understanding; be ever seeing, but never perceiving” (Isaiah 6:9 New International Version). The people heard Isaiah’s message but would not understand it, or they might allow the words to pass through their mind but not take hold. However, if the people would listen and understand the message, the outcome would be different. God said, “Otherwise they might see with their eyes, hear with their ears, understand with their hearts, and turn and be healed” (Isaiah 6:10 New International Version). A leader communicates when understanding takes place.

Learning from mistakes. Moses demonstrated that leaders learn from their mistakes. Moses had been faithfully leading the Israelites for a long time. But now, he was tired, hot, thirsty, and sick of all their complaining. God spoke to Moses and told him to talk to the rock to bring out water for the Israelites, but instead, Moses hit the rock twice. “Then Moses raised his

arm and struck the rock twice with his staff. Water gushed out, and the community and their livestock drank” (Numbers 20:11, New International Version). Moses made a mistake and disobeyed God; he struck the rock instead of speaking to the rock. For his mistake, Moses was not able to enter the Promised Land. Moses learned from this mistake that he needed to monitor his emotions during times of stress and be aware of the danger of making decisions when he was angry.

Additionally, Moses learned that he had to remain humble. Moses said, “Listen you rebels, must we bring you water out of this rock?” (Numbers 20:10, New International Version). Moses was giving himself and Aaron credit for bringing water from out of the rocks, but it was God who delivered the water. Likewise, leaders must monitor their emotions and remain humble when implementing an ERP. In this study, several participants highlighted the role of humility in leading an ERP implementation.

Field study implications. The researcher’s field of study was leadership as it related to implementing an Army ERP system on an Army installation. The study focused on one Army organization at an Army installation in the Mid-Atlantic Region. Sampayo and Maranga (2015) posited that individuals could become leaders through teaching processes and observation of the behavior of others. The researcher aligned this idea with the behavioral leadership theory which assumes leadership can be learned rather than being inherent to the individual. Therefore, the focus of the study was on leader behavior. Additionally, Kotter (1996) noted the critical need for leadership to change an organization successfully. Since the purpose of this study was to understand better the relationship between leader behavior and ERP implementation, the behavioral leadership theory, and Kotter’s change method were the foundation for this study.

The field study implications are threefold. First, from the findings of the study, the researcher reconfirmed the behavioral leadership theory. Second, the results highlighted the specific leadership behaviors that were crucial in implementing GCSS-Army on a military installation. Third, the findings provided support for task-oriented actions, relationship-oriented behaviors and change-oriented behaviors in an ERP implementation.

Importance of leader behaviors. Ali and Miller (2017), Coeurderoy et al. (2014), and Abbasi et al. (2014) noted that the most critical behaviors that support an ERP implementation are those that support management commitment and change management. Organization A's leaders consistently confirmed that the leader behaviors that demonstrated management commitment and change management had the most significant impact on completing an ERP implementation. Therefore, the leaders in Organization A supported the behavior leadership theory in the GCSS-Army implementation on an Army installation.

Garg and Chauhan (2015) and Toves et al. (2016) noted that poor communication was a top contributor to ERP implementation failures. Poor communication leads to low morale, diminished commitment, and resistance to change. Likewise, Organization A's leader agreed that excellent communication was essential and that leaders were instrumental in good communication. However, some of Organization A's leaders identified communication as a part of change management and management commitment. Bin Taher et al. (2015) noted that communication helped to educate employees about the purpose of change and ensured their commitment. Similarly, Muthuveloo et al. (2017) and Nandi and Kumar (2016) supported the idea that communication was a part of change management and management commitment.

Spoehr (2015) noted that Army leaders must empower their subordinates with authority and training to improve the Army's business processes. Although Organization A's leaders

acknowledged employee empowerment as significant, they noted it could be detrimental if the leader does not prepare the individual for the responsibility. The results indicated that employee empowerment was not as critical a factor in implementing GCSS-Army as management commitment and change management. Organization A's leaders noted that employee empowerment was an outcome of a successful ERP implementation, not a precursor for an ERP implementation.

The linkage between an ERP implementation and strategy was the least emphasized factor between Organization A's leaders. The leaders noted that the Army needs an overall plan for ERP implementations. The leaders also acknowledged that there were no standard business rules developed for Army ERP implementations that establishes how the Army configures and integrates these ERP solutions across the enterprise.

Organization A's leaders identified task-oriented behaviors, relationship-oriented behaviors, and change-oriented behaviors in an ERP implementation on an Army installation. For example, the leaders used the task-oriented behaviors for clarifying priorities, relationship-oriented behaviors for coaching employees, and change-oriented behaviors for advocating change. Therefore, Army leaders should demonstrate a combination of task-oriented behaviors, relationship-oriented behaviors, and change-oriented behaviors during an Army ERP implementation on a military installation.

Leadership style for an ERP implementation. Organization A's leaders identified the lifecycle phases of GCSS-Army as development, deployment, and sustainment. Leadership style aligns with the behavioral approach to leadership because leadership style emphasizes the leader's behavior. Rowold et al. (2015) determined that the relationship-oriented actions aligned with the transformational leadership style and that the task-oriented behaviors covered the

transactional leadership style. The leaders in Organization A noted that they used various leadership behaviors for each of the lifecycle phases of GCSS-Army. In the development phase, the relationship-oriented behaviors were more predominant among the leaders; therefore, the leaders aligned their behaviors with the transformational style. In the deployment stage, the task-oriented behaviors were more common among the leaders, so the transactional leadership style was most appropriate. In the sustainment phase, leaders used both task-oriented and relationship-oriented behaviors equally. Thus, both the transactional style and the transformational style are necessary.

Leader education and experience for an ERP implementation. Organization A's leaders indicated that it was difficult finding qualified people that have the education and experience to implement an Army ERP system. Therefore, an organization must keep the personnel that they have and not lose them to other organizations. The leaders indicated that experience was more important than education, but that the people needed both. Therefore, Army leaders should prioritize leader and employee development through training and experience.

Recommendations for Action

The researcher found that this study may impact military and civilian leaders in Army organizations implementing an Army ERP system. There were four pertinent conclusions from this study of leader behavior and an ERP implementation that are important for leaders to acknowledge to deploy an Army ERP successfully. The first conclusion was that leaders demonstrate their leadership in implementing an Army ERP through their behavior. Leaders cannot lead only through their words and orders, but they must show specific behaviors and take action. The second conclusion was that leaders must demonstrate behaviors that establish

management commitment and leads change management. The third conclusion was that a leader's behavior evolves from a transformational leadership style during the development phase of the ERP, to a transactional leadership style during the deployment phase, and then to a combination of both transformational and transactional during the sustainment phase. The fourth conclusion was that the leaders' education and experience were essential in an ERP implementation.

The researcher's findings from this study were that military and civilian leaders need to demonstrate specific leader behaviors to improve the success of implementing an Army ERP on a military installation. The researcher developed these recommendations from the study's findings and applications for military and civilian leaders implementing an ERP on an Army installation. These recommendations note particular steps to be taken by the leaders.

The researcher used multiple methods to distribute the findings, applications, and recommendations of the study. The primary process was the publication of the study. Additionally, the research will be distributed electronically upon request and through briefing to military organizations for professional development.

This study concluded the: (a) leaders lead through their behaviors; (b) leaders must establish management commitment and change management; (c) leaders' behavior changes through the various phases of the ERP implementation; and leaders must continue to seek experience and education. Therefore, the researcher made the following recommendations:

Recommendation 1: Develop a standard ERP strategy. The researcher recommends that Army leaders develop a military standard ERP implementation strategy. Currently, the Army is implementing and managing the Logistics Modernization Program (LMP), Global Combat Support System-Army (GCSS-A), Army Enterprise System Integration Program

(AESIP), and General Funds Business System (GFEBs). Although each of these Army ERPs use SAP software, they are all based on different standards and custom codes and are not integrated. Therefore, GCSS-Army sends information into AESIP; it is converted and translated into the language that LMP can understand. For LMP to communicate with GCSS-Army, LMP sends the information to AESIP, and the information is converted and translated into the language that GCSS-Army can understand. Only GCSS-Army and GFEBs are integrated and can communicate directly. Therefore, the researcher recommends that the Army develops a standard ERP strategy that uses common standards to integrate multiple Army ERP systems. The strategy would be the defining document that the Army uses to develop and integrate the different Army ERPs.

Recommendation 2: Prioritize management commitment. The researcher recommends that Army leaders prioritize management commitment as a top priority in the sustainment of GCSS-Army Increment 1 and the development and deployment of GCSS-Army Increment 2. Army leaders can demonstrate their commitment to GCSS-Army by setting the example and serving as a participant in the ERP process. The leaders must plan, organize, and monitor the schedule of priorities from cleansing data to the soldiers completing web-based training. Army leaders must continue to allocate resources for providing training materials, developing specific training packages for the user's needs, and providing continuous help desk assistance.

Recommendation 3: Prioritize change management. The researcher recommends that Army leaders prioritize change management as a top priority in the sustainment of GCSS-Army Increment 1 and in the development and deployment of GCSS-Army Increment 2. The researcher found that an ERP implementation faces severe challenges without proper change

management. Additionally, the researcher found that Organization A had previously received a budget decrease and assumed the risk in the area of change management during the deployment of GCSS-Army Increment 1 Wave 1. Army leaders can demonstrate their priority for change management by allocating the appropriate resources to the change management process and not accepting additional risk in this critical area. Additionally, Army leaders can promote change management by allocating resources for testing new ideas. Finally, Army leaders can prioritize change management in an ERP implementation by: (a) articulating a clear vision for the Army ERP system, (b) providing information that demonstrates the need for changing the current Army system, (c) explaining what undesirable outcomes may occur if the leader does not make the change, and (d) involving soldiers and other civilian employees in the change process.

Recommendation 4: Establish an executive coaching program. The researcher recommends that the leaders in Organization A establish an executive coaching program for their leaders and critical employees. It is challenging to assemble an adequately qualified ERP implementation team; therefore, leaders should provide an ERP implementation team with trained and experienced members. Executive coaching is a hands-on, one-on-one process between an executive and a professional external coach to work with middle- to high-level leaders. The process typically lasts between three months and one year and consists of face-to-face developmental discussions aimed at performance improvement or developing particular competencies. The coaching is meant to be practical and goal-focused; leveraging the leader's existing strengths and working through organizational issues like change management.

Recommendation 5: Assess leadership behaviors and styles of Army officers and civilian leaders. The researcher recommends assessing the leadership behaviors and styles of the Army officers and civilian leaders. This assessment will better prepare the military and

civilian leaders in leading an Army ERP implementation through the different phases of the ERP lifecycle. One tool to use to assess this leadership style is the Multifactor Leadership Questionnaire (MLQ). The MLQ is a measure of the transformational and transactional leadership style. The Self form measures the self-perception of leadership behaviors and the Rater form measures leadership. Given the various leadership challenges in the different phases of the ERP lifecycle, the researcher found that leaders use different leadership styles during the different stages of the ERP implementation. During the development phase, the leader that demonstrates relationship-oriented behavior facilitates support to the developer and the SAP expert as they transform the Army business system. However, as the implementation moves into the deployment stage, the leader promotes the implementation by exhibiting task-oriented behavior to establish priorities and monitor the progress of the Army unit that is receiving the Army ERP system. In the sustainment phase, the leader shows both a transformational and transactional leadership style to lead the ERP implementation. Therefore, the questionnaire will assist the leader in determining their dominant leadership style and in developing their less commanding style. This knowledge will prepare the leader to be more productive during the different stages of the ERP lifecycle.

Recommendations for Further Study

The purpose of this case study was to explore leadership behaviors and their relationship with an ERP implementation at an Army installation in the Mid-Atlantic region. From the data gathered in this study, the researcher found several leader behaviors and actions utilized during an ERP implementation. However, this study highlighted a few items that would benefit from further investigation. Therefore, the following are recommendations for further study that could

add to the work of literature and contribute to preparing Army and civilian leaders to implement an Army ERP system on an Army installation successfully.

Recommendation 1: Investigate the effects of implementing a standard ERP strategy. Future research should focus on investigating the effects of a military standard ERP implementation strategy. This recommendation for future research is a continuation of the previously stated recommendation for action to develop a standard ERP strategy. Currently, only GCSS-Army and GFEBS are integrated on a common standard and can communicate directly. Therefore, the researcher recommends that further study be conducted to investigate the effects of implementing an overarching ERP strategy that integrates Logistics Modernization Program (LMP), Global Combat Support System-Army (GCSS-A), Army Enterprise System Integration Program (AESIP), and General Funds Business System (GFEBS).

Recommendation 2: Investigate the interdependence between factors. Future research should focus on the interdependency between the factors of management commitment, change management, communications, employee empowerment, and linkage to strategy. The literature review revealed that the most critical leader behaviors fell within these five factors. However, during this study, the participants viewed that some of the factors were part of another factor. For example, some participants viewed communications as part of management commitment and change management. Likewise, some participants viewed employee empowerment as part of change management. Therefore, the researcher recommends that further study be conducted to determine the interdependency between these critical factors in an ERP implementation.

Recommendation 3: Investigate the difference in leader behaviors in the implementation of GCSS-Army at the tactical level and LMP at the strategic level. Future

research should focus on the difference in the critical leader behaviors in implementing GCSS-Army at the tactical level and LMP at the strategic level. Currently, GCSS-Army operates with the soldiers in the field. Therefore, guaranteed communications are not always available, and the leader establishes connections. Additionally, the Army unit using GCSS-Army is moving around the battlefield and not remaining in a fixed location. Finally, soldiers transfer between military units every three years. Therefore, a third of the Army unit changes every year. However, the Army Material Command (AMC) operates the LMP system and is predominately located at Life Cycle Management Commands, Arsenals, and Depots within the United States. Therefore, guaranteed communications are available. Additionally, AMC does not move around the battlefield and remains in a fixed location. Finally, the civilian employees at AMC do not transfer every three years but stay in their role indefinitely. AMC is similar to a commercial organization. Since there are different challenges between the tactical level and strategic level of the Army, the researcher recommends that further study be conducted to determine if different leader behaviors are needed to implement an Army ERP in different operating environments.

Reflections

In reflecting on this single-case study of behaviors used by military and civilian leaders implementing an Army ERP system on an Army installation, the researcher noted several points. These points relate to personal bias, preconceived ideas, and values of the researcher and the impact on the study. Additionally, this section addresses the changes in the researcher's thinking and reflections on the Biblical principles associated with the study.

Researcher bias. Since the researcher is a Department of the Army civilian, instructor in another Army ERP program, and a retired military officer, some personal biases and preconceived ideas toward leader behaviors and how they contribute to the implementation of an

Army ERP system exist. Based on previous military and civilian experience, the researcher knows the effectiveness of various leader behaviors. Additionally, the researcher has a leaning towards professional experience over academic literature. Although academic study is essential, the researcher believes that hands-on experience may be more advantageous.

Consequently, there are possible effects of the researcher's bias on the participants. First, since the researcher had prior experience with Army ERP systems, he may have steered the participants' discussion in specific directions compared to a researcher with no military or ERP experience. Second, based on the researcher leaning toward professional experience, the researcher may have developed the recommendations based on the participants' comments as opposed to the academic literature.

Changes in thinking. The researcher experienced changes in thinking as a result of conducting this study on leader behaviors in an ERP implementation on an Army installation. The researcher's experience was with LMP. The researcher had not considered the challenge of implementing an ERP in a tactical environment that did not have assured communications. Additionally, the researcher had not considered the impact of soldiers transferring between military units every three years. The case study participants referred to this phenomenon as an army in motion. Another change in thinking occurred with the revelation of the interdependence between management commitment, change management, communications, employee empowerment, and linkage to strategy. Initially, the researcher considered these factors to be independent of each other. The idea of the factors being interdependent was a new perspective.

Biblical principles. When reflecting on the Biblical principles of leadership, it is interesting to recognize that these principles apply to the military and civilian leaders in the Army. The idea of servant leadership provides us an example of how we can lead and serve

soldiers, contemporaries, and senior officials. Additionally, the Biblical leadership principles of commitment, change management, and developing leaders are essential to the military and civilian leader.

Summary and Study Conclusions

In summary, this section presented the findings, applications, and recommendations associated with the qualitative analysis of the data gathered from a single-case study of leader behavior used to implement an Army ERP system on an Army installation. The study addresses the following research questions:

1. What are the specific leadership behaviors required to complete an ERP implementation at an army installation within the Mid-Atlantic region?
2. How does the leader's education and experience contribute to a successful ERP implementation?
3. How does the leader's leadership style influence a successful ERP implementation?

The study included participant interviews, direct observation, and review of relevant documents.

An important conclusion in this study is that leaders lead through their behaviors and this is instrumental in a successful ERP implementation. The researcher based this study on the behavioral leadership theory, and this conclusion reconfirmed the behavioral leadership theory. The other conclusions were that the specific leader behaviors used to implement an Army ERP system included: (a) leaders must establish management commitment and change management, (b) the leaders' behavior changes through the various phases of the ERP implementation, and (c) leaders must continue to seek experience and education. Based on these conclusions, the researcher made the following recommendations:

1. Develop a standard ERP strategy;

2. Prioritize management commitment;
3. Prioritize change management;
4. Establish an executive coaching program; and
5. Assess leadership behaviors and styles of Army officers and civilian leaders.

In conclusion, by identifying the essential behaviors exhibited by military and civilian leaders in the implementation of an Army ERP system on an Army installation, this study closes the gap in defense business practice associated with the implementation of an Army ERP. As 90 percent of ERP system implementations are behind schedule or over budget, and the success rate is approximately 33 percent (Garg & Garg, 2014), the low ERP success rates are a compelling reason for investigating the factors which may influence a successful ERP implementation in an organization. Therefore, establishing the critical leader behaviors in an Army ERP implementation will serve to prepare better our military and civilian leaders for the challenges with implementing future Army ERP systems.

References

- Abbasi, S., Zamani, M., & Valmohammadi, C. (2014). The effects of ERP systems implementation on management accounting in Iranian organizations. *Education, Business and Society: Contemporary Middle Eastern Issues*, 7(4), 245-256.
- Al-Haddad, S., & Kotnour, T. (2015). Integrating the organizational change literature: A model for successful change. *Journal of Organizational Change Management*, 28(2), 234-262.
- Alhirz, H., & Sajeev, A. S. M. (2015). Do cultural dimensions differentiate ERP acceptance? A study in the context of Saudi Arabia. *Information Technology & People*, 28(1), 163-194.
- Ali, M., & Miller, L. (2017). ERP system implementation in large enterprises - a systematic literature review. *Journal of Enterprise Information Management*, 30(4), 666-692.
- Almajali, D. A., Masa'deh, R., & Tarhini, A. (2016). Antecedents of ERP systems implementation success: A study on Jordanian healthcare sector. *Journal of Enterprise Information Management*, 29(4), 549-565.
- Althonayan, M., & Althonayan, A. (2017). E-government system evaluation. *Transforming Government: People, Process and Policy*, 11(3), 306-342.
- Basu, R., & Bhola, P. (2016). Impact of quality management practices on performance stimulating growth. *The International Journal of Quality & Reliability Management*, 33(8), 1179-1201.
- Beheshti, H. M., Blaylock, B. K., Henderson, D. A., & Lollar, J. G. (2014). Selection and critical success factors in successful ERP implementation. *Competitiveness Review*, 24(4), 357-375.
- Bennett, R. J. (2016). The kaleidoscope called leadership. *Industrial and Commercial Training*, 48(2), 86-88.

- Berg, M. E., & Karlsen, J. T. (2016). A study of coaching leadership style practice in projects. *Management Research Review*, 39(9), 1122-1142.
- Bin Taher, N. A., Krotov, V., & Silva, L. (2015). A framework for leading change in the UAE public sector. *International Journal of Organizational Analysis*, 23(3), 348-363.
- Bintoro, B. P. K., Simatupang, T. M., Putro, U. S., & Hermawan, P. (2015). Actors' interaction in the ERP implementation literature. *Business Process Management Journal*, 21(2), 222-249.
- Blake, R. R., & Mouton, J. S. (1964). *The managerial grid*. Houston, TX: Gulf Publishing Company
- Blake, R. R., Mouton, J. S., & Bryson, D. E. (1980). The military leadership grid. *Military Review*, LX (7), 13-26. (Original work published in 1968).
- Boddy, C. R. (2016). Sample size for qualitative research. *Qualitative Market Research*, 19(4), 426-432.
- Borgmann, L., Rowold, J., & Bormann, K. C. (2016). Integrating leadership research: A meta-analytical test of Yuki's meta-categories of leadership. *Personnel Review*, 45(6), 1340-1366.
- Carutasu, N., & Carutasu, G. (2016). Cloud ERP implementation. *FAIMA Business & Management Journal*, 4(1), 31-43.
- Coelho, T. R., Cunha, M. A., & de Souza Meirelles, F. (2016). The client-consultant relationship in erp implementation in government: Exploring the dynamic between power and knowledge. *Information Polity: The International Journal of Government & Democracy in the Information Age*, 21(3), 307-320.

- Coeurderoy, R., Guilmot, N., & Vas, A. (2014). Explaining factors affecting technological change adoption. *Management Decision*, 52(6), 1082-1100.
- Cote, R. (2017). Vision of effective leadership. *Journal of Leadership, Accountability and Ethics*, 14(4), 52-63.
- Covey, S., & Ewell, P. L. (2015). The relationship between managerial orientation and productivity: An examination of captains from discovery channel's deadliest catch. *S.A.M. Advanced Management Journal*, 80(3), 57-68, 3.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Quantitative, qualitative, and mixed methods approaches* (5th ed.). Thousand Oaks, CA: Sage.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry & research design: Choosing among five approaches* (4th ed.). Thousand Oaks, CA: Sage.
- Daft, R. L. (2016). *Organization theory & design* (12th ed.). Boston, MA: Cengage Learning.
- Dezdar, S. (2012). Strategic and tactical factors for successful ERP projects: insights from an Asian country. *Management Research Review*, 35(11), 1070-1087.
- Dezdar, S., & Ainin, S. (2011). The influence of organizational factors on successful ERP implementation. *Management Decision*, 49(6), 911-926.
- Elkhani, N., Soltani, S., & Nazir Ahmad, M. (2014). The effects of transformational leadership and ERP system self-efficacy on ERP system usage. *Journal of Enterprise Information Management*, 27(6), 759-785.
- Exter, N., Grayson, D., & Maher, R. (2013). Facilitating organizational change for embedding sustainability into academia: A case study. *The Journal of Management Development*, 32(3), 319-332.

- Gandolfi, F., & Stone, S. (2017). The emergence of leadership styles: A clarified categorization. *Revista De Management Comparat International*, 18(1), 18-30.
- Garg, P., & Agarwal, D. (2014). Critical success factors for ERP implementation in a fortis hospital: An empirical investigation. *Journal of Enterprise Information Management*, 27(4), 402-423.
- Garg, P., & Chauhan, A. (2015). Factors affecting the ERP implementation in Indian retail sector. *Benchmarking*, 22(7), 1315-1340.
- Garg, P., & Garg, A. (2013). An empirical study on critical failure factors for enterprise resource planning implementation in Indian retail sector. *Business Process Management Journal*, 19(3), 496-514.
- Garg, P., & Garg, A. (2014). Factors influencing ERP implementation in retail sector: An empirical study from India. *Journal of Enterprise Information Management*, 27(4), 424-448.
- Garg, P., & Khurana, R. (2017). Applying structural equation model to study the critical risks in ERP implementation in Indian retail. *Benchmarking*, 24(1), 143-162.
- Gavidia, J. V. (2016). Impact of parent-subsidiary conflict on ERP implementation. *Journal of Enterprise Information Management*, 29(1), 97-117.
- Ghasabeh, M. S., Soosay, C., & Reaiche, C. (2015). The emerging role of transformational leadership. *The Journal of Developing Areas*, 49(6), 459-467.
- Gupta, V., & Singh, S. (2013). How leaders impact employee creativity: A study of Indian R&D laboratories. *Management Research Review*, 36(1), 66-88.
- Halliman, R. W. (2014). Understanding leadership: Let's put the horse before the cart. *American Journal of Management*, 14(4), 68-74.

- Huang, S. M., Chang, I. C., Li, S. H., & Lin, M. T. (2004). Assessing risk in ERP projects: identify and prioritize the factors. *Industrial Management & Data Systems*, 104(8), 681-688.
- Huang, T., & Yasuda, K. (2016). Comprehensive review of literature survey articles on ERP. *Business Process Management Journal*, 22(1), 2-32.
- Hwang, D., & Min, H. (2015). Identifying the drivers of enterprise resource planning and assessing its impacts on supply chain performances. *Industrial Management & Data Systems*, 115(3), 541-569.
- Katerattanakul, P., Lee, J. J., & Hong, S. (2014). Effect of business characteristics and ERP implementation on business outcomes. *Management Research Review*, 37(2), 186-206.
- Katz, R. L. (1955). Skills of an effective administrator. *Harvard Business Review*, 33(1), 33-42.
- Kim, S. H., & Mouritsen, J. (2013). Enterprise resource planning, operations and management. *International Journal of Operations & Production Management*, 33(8), 1075-1104.
- Kim, Y., Lee, Z., & Gosain, S. (2005). Impediments to successful ERP implementation process. *Business Process Management Journal*, 11(2), 158-170.
- Koohang, A., & Hatch, M. (2017). Leadership effectiveness in IT-centered organizations: Gender and levels of management. *The Journal of Computer Information Systems*, 57(4), 385-391.
- Kotter, J. P. (1996). *Leading change*. Boston, MA: Harvard Business School Press.
- Krogerus, M., & Tschäppeler, R. (2012). *The decision book: 50 models for strategic thinking*. New York, NY: W. W. Norton & Company, Inc.

- Kuo, C. (2014). Effect of enterprise resource planning information system on business performance: An empirical case of Taiwan. *Journal of Applied Finance and Banking*, 4(2), 1-19.
- Landis, E. A., Hill, D., & Harvey, M. R. (2014). A synthesis of leadership theories and styles. *Journal of Management Policy and Practice*, 15(2), 97-100.
- Leger, P., Riedl, R., & vom Brocke, J. (2014). Emotions and ERP information sourcing: The moderating role of expertise. *Industrial Management & Data Systems*, 114(3), 456-471.
- Lewin, K., Lippitt, R., & White, R. K. (1939). Patterns of aggressive behavior in experimentally created social climates. *Journal of Social Psychology*, 10(2), 271-301.
- Li, W., Liu, K., Belitski, M., Ghobadian, A., & O'regan, N. (2016). E-leadership through strategic alignment: An empirical study of small- and medium-sized enterprises in the digital age. *Journal of Information Technology*, 31(2), 185-206.
- Likert, R. (1961). *New patterns of management*. New York, NY: McGraw-Hill.
- McCleskey, J. A. (2014). Situational, transformational, and transactional leadership and leadership development. *Journal of Business Studies Quarterly*, 5(4), 117-130.
- McDonough, J. P. (2016). GCSS-Army: Wave 1 is done. *Army sustainment*, 62-63.
- Mulder, U., & Whiteley, A. (2007). Emerging and capturing tacit knowledge: a methodology for a bounded environment. *Journal of Knowledge Management*, 11(1), 68-83.
- Muthuveloo, R., Chiek, K. C., & Ping, T. A. (2017). An empirical analysis of the perceived skills in predicting managerial effectiveness: The Malaysian perspective. *Global Business and Management Research*, 9(4), 41-59.
- Nagendra, P. B. (2000). Leadership development for the information economy. *International Journal of Commerce and Management*, 10(3).

- Nandi, M. L., & Kumar, A. (2016). Centralization and the success of ERP implementation. *Journal of Enterprise Information Management*, 29(5), 728-750.
- Northouse, P. G. (2016). *Leadership: Theory and practice* (7th ed.). Thousand Oaks, CA: Sage.
- Ottrey, E., & Porter, J. (2016). Hospital menu interventions: a systematic review of research. *International Journal of Health Care Quality Assurance*, 29(1), 62-74.
- Overstreet, R. E., Hanna, J. B., Byrd, T. A., Cegielski, C. G., & Hazen, B. T. (2013). Leadership style and organizational innovativeness drive motor carriers toward sustained performance. *International Journal of Logistics Management*, 24(2), 247-270.
doi:<http://dx.doi.org/10.1108/IJLM-12-2012-0141>
- Pan, W. (2017). The implementation of electronic recordkeeping systems. *Records Management Journal*, 27(1), 84-98.
- Pantouvakis, A., & Patsiouras, C. (2016). Exploring the role of leadership style on the service quality-customer satisfaction link. *International Journal of Quality and Service Sciences*, 8(1), 88-101.
- Park, J., & Park, J. (2015). Enterprise resource planning and efficiency. *Managerial Finance*, 41(4), 405-415.
- Peng, G. C. A., & Gala, C. (2014). Cloud erp: A new dilemma to modern organisations? *The Journal of Computer Information Systems*, 54(4), 22-30.
- Peterson, T. O., & Van Fleet, D. D. (2004). The ongoing legacy of R.L. Katz: An updated typology of management skills. *Management Decision*, 42(10), 1297-1308.
- Pishdad, A., & Haider, A. (2013). ERP institutionalization: Exploring the influential factors. *Journal of Enterprise Information Management*, 26(6), 642-660.

- Pollard, C. E., & Morales, M. (2015). Exploring the impact of aligning business and IS strategy types on performance in small firms. *Journal of Small Business Strategy*, 25(1), 26-45.
- Program Executive Office Enterprise Integration Office (PEOEIO). (2017). *Logistics modernization program (lmp) executive overview*. [PowerPoint slides].
- Reitz, A. P. (2017). *An exploration of the organizational attributes that attract high quality pilots to regional airlines* (Doctoral dissertation). Retrieved from <http://digitalcommons.liberty.edu/doctoral/>
- Revenaugh, L., & Muretta, M. (2013). The influence of enterprise systems on business and information technology. *Business and Information Technology 1*. http://digitalcommons.mtech.edu/business_info_tech/1
- Ronald, B. (2014). Comprehensive leadership review - literature, theories and research. *Advances in Management*, 7(5), 52-66.
- Rowley, J., & Slack, F. (2004). Conducting a literature review. *Management Research News*, 27(6), 31-39.
- Rowold, J., Borgmann, L., & Diebig, M. (2015). A "tower of Babel"? - Interrelations and structure of leadership constructs. *Leadership & Organization Development Journal*, 36(2), 137-160.
- Ruiz, C. E., Hamlin, R. G., & Gresch, E. B. (2017). Contemporary perceptions of effective and ineffective managerial behavior: A 21st-century case from the U.S.A. *Journal of Management Policy and Practice*, 18(1), 59-77.
- Ryan, G. W., & Bernard, H. R. (2003). Techniques to identify themes. *Field Methods*, 15(1), 85-109.

- Saade, R. G., & Nijher, H. (2016). Critical success factors in enterprise resource planning implementation. *Journal of Enterprise Information Management*, 29(1), 72-96.
- Sampayo, J., & Maranga, K. (2015). The Beatles' personalities-leadership style as it relates to the 21st century. *Journal of Leadership, Accountability and Ethics*, 12(1), 98-106.
- Schniederjans, D., & Yadav, S. (2013). Successful ERP implementation: An integrative model. *Business Process Management Journal*, 19(2), 364-398.
- Shao, Z., Feng, Y., & Hu, Q. (2016). Effectiveness of top management support in enterprise systems success: A contingency perspective of fit between leadership style and system life-cycle. *European Journal of Information Systems*, 25(2), 131-153.
- Shatat, A. S. (2015). Critical success factors in enterprise resource planning (ERP) system implementation: An exploratory study in Oman. *Electronic Journal of Information Systems Evaluation*, 18(1), 36-45.
- Silva, A. (2016). What is leadership? *Journal of Business Studies Quarterly*, 8(1), 1-5.
- Sirisetti, S. (2011). Quality leadership in the public sector: Strategies and challenges. *The Journal of Commerce*, 3(4), 45.
- Sohel, S. M., & Quader, M. S. (2017). Transforming it from a cost centre to a value centre perspective: A case study on the British standards institute. *Journal of Services Research*, 17(1), 71-105.
- Spector, B. (2013). *Implementing organizational change: Theory into practice* (3rd ed.). Upper Saddle River, NJ: Prentice Hall.
- Spoehr, T. W. (2015). Adapt best practices from private sector. *Army Magazine*, 65(10), 171-174.

- Stake, R. E. (2010). *Qualitative research: Studying how things work*. New York, NY: Guilford Press.
- Stanciu, V., & Tinca, A. (2013). ERP solutions between success and failure. *Accounting and Management Information Systems*, 12(4), 626-649.
- Stogdill, R. (1974). *Handbook of leadership: A survey of theory and research*. New York, NY: Free Press.
- Subramanian, G. H., & Peslak, A. R. (2010). User perception differences in enterprise resource planning implementations. *The Journal of Computer Information Systems*, 50(3), 130-138.
- Thompson, G., & Glasø, L. (2015). Situational leadership theory: A test from three perspectives. *Leadership & Organization Development Journal*, 36(5), 527-544.
- Tognazzo, A., Gubitta, P., & Gerli, F. (2017). Fostering performance through leaders' behavioral competencies. *International Journal of Organizational Analysis*, 25(2), 295-311
- Toves, P. R., Graf, L., & Gould, D. A. (2016). Innovative use of force field analysis: Factors influencing technology-enabled change. *Journal of Behavioral and Applied Management*, 17(2), 85-102.
- Underhill, B. O., McAnally, K., & Koriath, J. J. (2007). *Executive coaching for results: The definitive guide to developing organizational leaders*. Oakland, CA: Berrett-Koehler.
- U.S. Department of the Army. (2012). *Army leadership*. Army Doctrine Publication 6-22. Washington, DC: U.S. Department of the Army.
- U.S. Government Accountability Office. (2010, April). Actions needed to improve implementation of the army logistics modernization program (Publication No. GAO- 10-461).

- U.S. Government Accountability Office. (2015, April). Defense Inventory: Services generally have reduced excess inventory, but additional actions are needed. (Publication No. GAO-15-350).
- Usmanij, P. A., Chu, M., & Rajiv, K. A. (2013). Does the extent to which an erp system is human-centered contribute to user satisfaction with that system? *Accounting and Management Information Systems*, 12(4), 595-625.
- Vance, G. A. (2017). *Leader behaviors for sustaining the implementation of lean methodologies in multi-national companies: A qualitative case study* (Doctoral dissertation). Retrieved from <http://digitalcommons.liberty.edu/doctoral/>
- Wong Humborstad, S. I., Nerstad, G. L., & Dysvik, A. (2014). Empowering leadership, employee goal orientations and work performance. *Personnel Review*, 43(2), 246-271.
- Xiang, J., Archer, N., & Detlor, B. (2014). Business process redesign project success: The role of socio-technical theory. *Business Process Management Journal*, 20(5), 773-792.
- Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). Thousand Oaks, CA: Sage.
- Yukl, G. (2012). Effective leadership behavior: what we know and what questions need more attention. *Academy of Management Perspectives*, 26(4), 66-85.
- Yukl, G. (2013). *Leadership in organizations* (8th ed.). Upper Saddle River, NJ: Prentice Hall.
- Zeb, A., Ahmad, S., & Saeed, G. (2018). Leadership effectiveness and organizational performance: Exploring gaps in the existing literature. *Business and Economic Review*, 10(1), 95-106.

Appendix A: Participant Recruitment Email

[Insert Date]

[Recipient]

[Title]

[Organization]

Dear [Recipient]

My name is Roy Ray, and as a graduate student in the School of Business at Liberty University, I am researching an Army Enterprise Resource Planning (ERP) system as part of the requirements for a Doctor of Business Administration degree. The purpose of my study is to increase the understanding of the leader behaviors used to complete an ERP implementation on an Army Installation successfully. I am writing to invite you to participate in my study.

As a senior leader in an organization involved in implementing an ERP at an Army Installation, you are being asked to take part in a face-to-face interview. The interview should take approximately one hour. Your name and other identifying information will be requested as part of your participation, but this information will remain confidential.

I will follow up with you by phone in a few days to answer any questions. If you are willing to participate, please contact me at 804-467-9723 or roy.t.ray.civ@mail.mil to schedule an interview.

A consent document is attached to this letter and contains additional information about my research. Please sign the consent document and return it to me. You may do this by scanning the signed document and sending it to me as an email attachment, or you can return it to me at the time of the interview.

Sincerely,

Roy T. Ray Jr.
School of Continuing Education
College of Professional and Continuing Education
US Army Logistics University

Appendix B: Participant Consent Form

CONSENT FORM

Leader Behavior in Successfully Completing an ERP Implementation at an Army Installation

Roy T. Ray
Liberty University
School of Business

You are invited to be in a research study that will examine the leader behaviors involved in successfully completing an Enterprise Resource Planning (ERP) implementation at an Army installation. You were selected as a possible participant because you are a senior leader in an Army organization and have successfully completed an ERP implementation at an Army installation. Please read this form and ask any questions you may have before agreeing to be in the study.

Roy Ray, a doctoral candidate in the School of Business at Liberty University, is conducting this study.

Background Information: The purpose of this study is to examine the specific leadership behaviors required to successfully complete an ERP implementation at an Army installation within the Mid-Atlantic region

Procedures: If you agree to be in this study, I would ask you to do the following things:

Take part in a 60-minute interview with open-ended questions designed to solicit information about your ERP implementation experience. I will audio-record the interview so that I can be sure to document your answers accurately.

Risks: The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

Benefits: Participants should not expect to receive a direct benefit from taking part in this study. The benefits to society include the increase in the body of knowledge associated with implementing an ERP so that others may experience greater success with their ERP implementation than they may have otherwise.

Compensation: Participants will not be compensated for participating in this study.

Confidentiality: The records of this study will be kept private. In any sort of report I might publish, I will not include any information that will make it possible to identify a subject. Research records will be stored securely, and only the researcher will have access to the records. Participants will be assigned a pseudonym. I will conduct the interviews in a location where others will not easily overhear the conversation. Data will be stored on a password locked computer and may be used in future presentations. After three years, all electronic records will be deleted. Interviews will be recorded and transcribed. Recordings will be stored on a password

locked computer for three years and then erased. Only the researcher will have access to these recordings.

Voluntary Nature of the Study: Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free not to answer any question or withdraw at any time without affecting those relationships.

How to Withdraw from the Study: If you choose to withdraw from the study, please contact the researcher at the email address/phone number included in the next paragraph. Should you choose to withdraw, data collected from you will be destroyed immediately and will not be included in this study.

Contacts and Questions: The researcher conducting this study is Roy Ray. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact Roy at 804-467-9723 or roy.t.ray.civ@mail.mil. You may also contact the researcher's faculty advisor, Dr. Adam Sullivan at acsulliv@liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd, Green Hall Ste. 2845, Lynchburg, VA 24515 or email at irb@liberty.edu.

Please notify the researcher if you would like a copy of this information for your records.

Statement of Consent: I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

☐ The researcher has my permission to audio-record me as part of my participation in this study.

Signature of Participant

Date

Signature of Investigator

Date

Appendix C: Personnel Interview Questions

1. Please briefly describe the ERP implementation your organization has led and where the process is today.
 - a. What were the most significant challenges?
 - b. How did you define a successful ERP implementation?
2. What were the key strategies and resources you used in the ERP implementation? What worked? What didn't work?
3. How would you describe the level of importance of each of these factors concerning implementing an ERP at an Army Installation? Explain the rationale for the rating.
 - a. Management commitment
 - b. Change management
 - c. Communication
 - d. Employee empowerment
 - e. Linkage to strategy
 - f. Any other critical success factors
4. What specific behaviors did you utilize to foster the success factors listed in the previous question? How were these behaviors developed and encouraged
 - a. How did your education and experience contribute to a successful ERP implementation?
5. Discuss what leadership issues within the military organization impacted the ERP implementation.
 - a. How did your leadership style influence a successful ERP implementation?
6. What has been the impact caused by the ERP implementation:
 - a. On operational results?
 - b. On soldier morale?
 - c. On the budget?
7. Is there anything else you would like to add?

Appendix D: Interview Guide

Time of Interview:

Date:

Place:

Interviewer: Roy T. Ray

Interviewee:

Position of interviewee:

The purpose of this study is to increase the understanding of the leader behaviors used to complete an ERP implementation on an Army Installation successfully.

Opening statement: I want to thank you for being willing to contribute to the study to explore leadership behaviors and their relationship with an ERP implementation at an army installation in the Mid-Atlantic region. Your participation is much appreciated.

Questions:

1. Please briefly describe the ERP implementation your organization has led and where the process is today.
 - a. What were the most significant challenges?
 - b. How did you define a successful ERP implementation?
2. What were the key strategies and resources you used in the ERP implementation? What worked? What didn't work?
3. How would you describe the level of importance of each of these factors concerning implementing an ERP at an Army Installation? Explain the rationale for the rating.
 - a. Management commitment
 - b. Change management
 - c. Communication
 - d. Employee empowerment
 - e. Linkage to strategy
 - f. Any other critical success factors
4. What specific behaviors did you utilize to foster the success factors listed in the previous question? How were these behaviors developed and encouraged?
 - a. How did your education and experience contribute to a successful ERP implementation?

5. Discuss what leadership issues within the military organization impacted the ERP implementation.
 - a. How did your leadership style influence a successful ERP implementation?
6. What has been the impact caused by the ERP implementation:
 - a. On operational results?
 - b. On soldier morale?
 - c. On the budget?
7. Is there anything else you would like to add?

Closing Statement: Thank you for participating in the study. I want to assure you that your comments will remain confidential and that you will receive a copy of your interview transcript.