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Succession Planning Strategies for Retiring Employees in the Department of Defense

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Abstract

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by

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MBA, University of Baltimore, 2008

BA, Notre Dame of Maryland University, 2004

Doctoral Study Submitted in Partial Fulfillment

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Doctor of Business Administration

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Abstract

In 2017, more than 18% of the workforce in the Department of Defense (DoD) was eligible to retire. Employee retirement continues to present a persistent shortage of DoD knowledge workers, especially in security protections. The purpose of this qualitative single case study within a DoD intelligence agency was to explore succession planning strategies that DoD managers use to ensure knowledge possessed by retirees was transitioned to incumbent knowledge workers. The conceptual frameworks for this study were the 7-pointed star model for succession planning and the 4 pillars of knowledge management. The population was DoD managers from STEM and cyber intelligence agency departments located in the Baltimore-Washington, D.C., area who have successfully implemented succession planning for senior knowledge workers. Data were collected from interviews with 6 DoD managers and a comprehensive review of documents on succession planning. Data were analyzed using Yin's 5-phased cycle. Four themes emerged from this study: prioritize and shift the culture toward succession planning, implement succession planning for the entire workforce, develop individual and organizational succession plans, and establish a succession planning policy and enterprise-wide program. The implications for positive social change include the potential for increased agency continuity by improving employee retention, which may enhance organizational and community relationships through the prosperity of knowledge workers.

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Dedication

This work is dedicated to my loving and supportive family and friends. Specifically, I dedicate my accomplishment to my mother, Doris Whitaker, for planting a solid foundation at an early age and always believing in me when I did not believe in myself. I would not have embarked on this journey without her. I also dedicate this work to my daughter and shining star, Faith McCullough. She encourages and motivates me to be better every day. This study is proof that with God’s support, hard work, and perseverance you can accomplish anything. In addition, I recognize Jason McCullough for being a partner since I started this journey. Thank you to him for always stepping in when I needed him to take extra care of our daughter.

To my sisters, Darnette Putney and Dominique Hughes, I recognize you both for your inspiration and for guidance. To my nieces, Genique, Christien, Jaila, Jaide, Sophia, Tylah, and Autumn, thank you for serving as inspiration because auntie could never let you down and not complete this process. To Gary Ledbetter and the family, thank you for joining me in the last phase of this journey; your presence is invaluable, and I look forward to building an abundant future. Finally, I want to thank and salute all my family and friends, who helped me stay focused, encouraged me to stay the course, and instilled in me that the race is not given to the swift, but to the one who endures until the end. I have reached the top by standing on your shoulders. Thank you and I love you!

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First and foremost, I must thank God for giving me the strength, endurance, and guidance to accomplish this task. I know that none of this would have been possible without His grace and mercy. I would also like to thank my committee chair, Dr. Erica Gamble, for being a steady, calming voice that has encouraged and supported me throughout the phases of this journey. You have served as God’s angel and it was a blessing to have worked with you. To my second committee member, Dr. Krista Laursen, I know that we have not worked together long but your reviews and guidance added value to my study. Thank you for coming onboard and getting right to work. To my university research reviewer, Dr. Lisa Kangas, this journey would not have been possible without you. Thank you for challenging me and pushing me beyond what I thought I was capable of accomplishing.

Finally, I would like to thank the Department of Defense for supporting my research and allowing me to explore succession planning in the organization. It has been a pleasure to serve the men and women of DoD in this capacity. I am deeply honored and appreciative of the confidence they have shown in me and I look forward to continuing our partnership beyond this study to improve succession planning efforts.

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Section 1: Foundation of the Study

In this section, I address the key criteria required for effective knowledge worker succession planning and tacit knowledge management (KM) in the Department of Defense (DoD). The DoD must develop processes and strategies to transfer knowledge among employees to maintain an effective, competent workforce (Government Accountability Office [GAO], 2013a). Although succession planning is sometimes viewed as a complex human resource process that consumes resources (Church, 2014), workforce planning is vital to sustain a knowledgeable workforce to unlock employees' full potential and remain competitive (GAO, 2016). In this section, I explore succession planning strategies to ensure knowledge possessed by retirees is transitioned to incumbent knowledge workers. I conducted a qualitative case study to explore the phenomenon of succession planning strategies in the DoD within the context of retirees and tacit KM. Readers will gain an understanding of knowledge workers' needs as a significant portion of the workforce departs from federal service.

Background of the Problem

In an interdependent and global environment, the United States is experiencing new and increasingly complex issues that require federal agencies to maintain a talented, diverse, high-performing, knowledge-based workforce (GAO, 2013a). However, federal agencies have a continuous human capital challenge related to the departure of the most experienced employees who take with them their vital perspectives and knowledge gained over their careers (GAO, 2013a). To address the human capital challenge, federal agencies need to devote enough resources to workforce succession planning. More attention must be given to succession planning because more than one third of federal agencies' executive personnel are eligible to retire (GAO, 2013a).

In May 2013, the GAO reported that the DoD's military and civilian workforce peaked in 2011 at 3.1 million and is projected to gradually decrease over the next 5 years to about 2.9 million personnel (GAO, 2013b). By using a framework for strategic succession planning with effective KM for tacit knowledge retention, DoD managers could improve their structured process to ensure a successful method that leverages best practices from experienced personnel. By embedding tacit knowledge retention and transfer into the operations, DoD managers may encourage the incumbent workforce to learn from predecessors and federal agencies to maintain a talented, engaged workforce to meet its mission.

Problem Statement

DoD faces a critical need to establish knowledge retention transfer procedures for workers with mission-critical skills because of a rapidly depleting workforce (GAO, 2015). Within one intelligence agency in DoD, over 18% of the workforce was eligible to retire in 2017 with an additional 3% increase each year over the next 5 years (DoD Human Resources, 2017). The general business problem is that increasing employee retirement presents a persistent shortage of DoD knowledge workers especially in the security protections to combat threats (GAO-17-533T, 2017). The specific business problem is that some DoD managers have inadequate succession planning strategies to ensure knowledge possessed by retirees is transitioned to incumbent knowledge workers.

Purpose Statement

The purpose of this qualitative single case study within a department in a DoD intelligence agency was to explore succession planning strategies that DoD managers may use to ensure knowledge possessed by retirees is transitioned to incumbent knowledge workers. The population included six DoD managers from science, technology, engineering, and math (STEM) departments and cyber intelligence agency departments located in the Baltimore-Washington, D.C., area, who successfully implemented succession planning for senior knowledge workers. Succession planning with effective knowledge transfer techniques could increase DoD managers' knowledge, allowing employees to perform at a higher skill level and enhancing job satisfaction and employee retention. The implication for positive social change includes the potential for increased agency continuity by improving employee retention, which may enhance organizational and community relationships through the prosperity of knowledge workers.

Nature of the Study

The three research methods are qualitative, quantitative, and mixed methods (Zadrozny, McClure, Lee, & Jo, 2016). I used the qualitative method to understand the issues associated with effective and efficient succession planning strategies used by DoD managers for senior knowledge workers that ensure knowledge is transferred from retirees to the incumbent workforce. Using qualitative research allows researchers to study complex phenomena by observing behavior and analyzing participants' experiences (Cairney & St Denny, 2015). In contrast, quantitative researchers use closed-box questionnaires to test hypotheses about variables' relationships or differences (Cairney & St Denny, 2015). Mixed-method research includes both a qualitative element and quantitative element (Zadrozny et al., 2016). To explore successful succession planning strategies that DoD managers use to ensure knowledge transfer among the workforce, I did not test hypotheses about variables' relationships or differences, which is part of a quantitative study or the quantitative portion of a mixed-method study. Qualitative researchers use inductive reasoning and a holistic strategy to understand the phenomenon (Dasgupta, 2015). The use of a qualitative method can provide important context and insights on succession planning for senior knowledge workers by DoD managers.

I considered three qualitative research designs for my research: a case study, phenomenology, and ethnography. I identified the case study design as the most appropriate for my research because I was exploring a phenomenon on succession planning within the context of retiring DoD knowledge workers. According to Yin (2013), a case study design entails exploring a specific, complex phenomenon. Gill (2014) defined phenomenology as a philosophical movement to study a phenomenon and to explore the meanings of lived experiences of participants. A phenomenological design was not appropriate because I was not seeking to explore the meanings of participants' lived experiences. Mannay and Morgan (2015) defined ethnography as a research design to identify and explore firsthand stories of culture and customs of people. I did not select an ethnographic design because I was not seeking to study groups' or societies' cultures.

Research Question

The central research question was as follows:

RQ: What succession planning strategies do DoD managers use to ensure knowledge possessed by retirees is transitioned to incumbent knowledge workers?

Interview Questions

The principal interview questions for addressing the research question were the following:

1. In your experience, what is the impact when succession planning is not properly implemented as a knowledge worker departs service?

2. What are the critical steps in the process of succession planning for senior knowledge workers within the DoD STEM and cyber departments?

3. What are the effective KM techniques used by DoD managers for ensuring the retention of retiring knowledge workers in STEM and cyber fields?

4. How are DoD managers effectively retaining and transferring the tacit knowledge of retirees?

5. What were key barriers to implementing successful strategies for retiring senior knowledge workers?

6. What types of processes and tools have DoD managers in STEM and cyber departments used to address key barriers in the implementation of successful strategies for succession planning and tacit KM for knowledge workers?

7. What, if any, incentives are used by DoD managers in STEM and cyber departments to enhance the implementation of succession planning and tacit KM for knowledge workers?

8. What additional information can you share with me to understand the successful strategies that DoD uses for succession planning of STEM knowledge workers?

Conceptual Framework

The conceptual model for my study was the seven-pointed star model for succession planning and the pillars of KM. Both conceptual models aligned with the purpose of my study to identify and explore succession planning strategies that DoD managers use to ensure the retention of retirees' knowledge.

Seven-pointed Star Model for Succession Planning

Using Rothwell's (2005) seven-pointed star model for systematic succession planning can ensure leadership continuity in key positions, retention and enhancement of knowledge capital, and individual advancement. The first step in developing a seven-pointed star model for succession planning is commitment from leadership because management has the responsibility to ensure stability of quality personnel (Rothwell, 2016). The second and third steps in the model are assessing the current human capital and evaluating employees' abilities respectively (Rothwell, 2016). In Step 4, managers define the needs of the organization in relation to its mission and vision, and in Step 5, managers focus on future competencies needed by an employee to fill future requirements (Rothwell, 2016). The final two steps are outlining what is needed to prepare an employee to fill a future gap and establishing the plan to meet the goal and evaluating efficiency (Rothwell, 2016).

Four Pillars of Knowledge Management

Stankosky and Baldanza (2000) developed the four pillars conceptual framework for KM, which focuses on the four components essential for an effective and efficient practice: (a) leadership, (b) organization, (c) technology, and (d) learning. Leadership, organizational culture, and processes are key factors of KM that influence the value placed on KM by management and ensure implementation throughout the organization (Stankosky, 2005). Technology helps manage knowledge and leverages intellectual capital (Stankosky, 2005). The learning component ensures knowledge is used as a strategic asset accounted for and transferred within the organization (Stankosky, 2005). By ensuring proper integration of KM into the succession planning process, DoD managers can develop and implement successful practices that capture and retain knowledge for the future workforce.

Operational Definitions

The following terms are defined as they were used in the study:

Explicit knowledge: Knowledge that has been recorded, stored, and classified (Allameh, Pool, Jaberi, & Soveini, 2014).

Knowledge: Information that is formed through a combination of education, experiences, values, and systematic attitudes that provide a proper framework for evaluation and application of new experiences and information (Allameh et al., 2014).

Knowledge management (KM): A process that facilitates the creation and application of knowledge within organizational interactions as well as capturing and storing knowledge in repositories to make knowledge explicit (Kimble, 2013).

Knowledge worker: An individual who applies productive work ideas, concepts, and information rather than manual skill; examples include engineers, doctors, and lawyers (Schlechter, Thompson, & Bussin, 2015).

Succession planning: A consistent set of precise procedures used to ensure the identification, development, and long-term retention of skilled and talented employees (Seniwoliba, 2015).

Tacit knowledge: Knowledge that resides within an individual and is not easily transferred (Allameh et al., 2014); the expertise acquired by an individual over time through experience (Bednarska & Olszewski, 2013).

Assumptions, Limitations, and Delimitations

Assumptions are considered unverified facts (Rodarte, 2017). Qualitative research begins with a philosophical assumption about the current state of existence (ontology) along with an understanding of the problem (epistemology), the foundation of research (axiology), and the emergent conceptual framework (methodology; Teddlie & Tashakkori, 2012; Williams, 2015). In this study, I assumed that DoD succession planning efforts were focused on key leadership positions and not the entire workforce. I also assumed that the DoD was not engaging in succession planning at the workforce level. Third, I assumed a lack of tacit KM practices existed within DoD succession planning strategies. Finally, I assumed that participants would answer the interview questions without bias and with integrity.

Limitations are confines that have been set (Netcoh, 2017) and refer to potential study weaknesses. The study was limited by the ability to access managers of DoD knowledge workers. Access to managers of DoD knowledge workers required negotiating permissions from federal government gatekeepers for access within a bureaucratic institution with organizational rules and regulations (Williams, 2015). This limitation was mitigated because DoD representatives signed an authorization agreement with Walden University that allowed me access to participants for this study.

This research was further limited to a qualitative single case study. Qualitative research is not judged comparatively with quantitative research because different criteria are used to assess the two methods (Houghton, Casey, Shaw, & Murphy, 2013). The rigor for qualitative case studies is determined by credibility, dependability, confirmability, and transferability (Houghton et al., 2013). In this study, I focused on DoD managers within a department of an intelligence agency and explored their succession planning strategies.

Rodarte (2017) defined delimitations as the scope of a study. I included six DoD managers of knowledge workers from STEM and cyber intelligence agency departments within an intelligence agency in the Baltimore-Washington, D.C. metropolitan area. Qualifying factors for selecting participants consisted of managers who manage skilled employees in STEM and cyber intelligence agency departments with availability to participate in the interview process. Another delimitation in my study was the number of subjects to a single organization in the DoD. I did not include participants from other government organizations or corporations, but information in this study may be applicable to other entities.

Significance of the Study

Contribution to Business Practice

My findings in this research effort are of potential value to business practice because the succession planning strategies studied could ensure retiree knowledge can be captured and applied to enhance retained employee skills. My findings in this study also have the potential to highlight issues and processes for retaining knowledge of STEM and cyber knowledge workers in DoD. Succession planning for an organization's workforce is essential for business continuity.

By enhancing succession planning with KM, organizational leaders can review, adopt, or use successful strategies to incorporate workforce shadowing, mentoring, or knowledge repositories to ensure the incumbent workforce learns from predecessors. The federal government and corporations can maintain a mission-critical skilled workforce and reduce the learning curve for incumbents, which reduces workplace stress and increases employee retention. Succession planning allows organizations to maintain competitive advantage, reduce recruitment and training resources, and mitigate potential workforce and competency gaps.

Implications for Social Change

This research may contribute to social change by improving knowledge workers' ability to contribute to the local community through gainful employment. The federal government and corporations are likely to be more effective when the workforce has been adequately and efficiently prepared through succession planning, which could affect job satisfaction and employee retention. If employees receive adequate knowledge transfer, less training is required because the skill gap is reduced and personal stress from the inability to perform is minimized because knowledge is available. This could directly impact families' work and life balance due to stress reduction and fewer hours mandated in the office. Furthermore, the federal government and corporations maintain continuity of operations during personnel turnover and remain responsive to stakeholders and potential communities' needs.

A Review of the Professional and Academic Literature

The literature review includes concepts of succession planning and content about how KM techniques—specifically, tacit knowledge retention and transfer—can improve the process for knowledge workers in the DoD. The review includes a comprehensive search of professional research databases: ABI/INFORM Collection, Business Source Complete, EbscoHost, Emerald Insight, Military and Government Collection, ProQuest, and Science Direct. The strategy used for searching the literature included the following terms: *DoD, succession planning, knowledge management, succession planning/knowledge management techniques and strategies, knowledge workers*, *tacit knowledge,* and *employee retention*.

This literature review consists of 145 sources, such as scholarly journals, seminal works, federal government laws and policies, and government issued reports. It contains over 85% peer-reviewed articles. There were 123 scholarly (peer-reviewed) articles, of which 104 or 85% were published from 2015 to 2019.

The literature review contains a critical analysis and synthesis of the topics organized into three sections: (a) the conceptual frameworks (seven-pointed star model for succession planning and the four pillars of KM), (b) the topical foundation, and (c) the analysis of succession planning and KM related to DoD knowledge workers. Part 1 relates to the conceptual frameworks and associated techniques. The techniques focus on effective tacit KM techniques because explicit knowledge is readily available in most organizations, but tacit knowledge is not easily communicated. Part 2 provides the foundation and holistically analyzes succession planning and KM. In Part 3, I analyze succession planning and KM within the DoD environment and apply the frameworks to knowledge workers.

Application to Business Problem

The business problem is that some DoD managers have inadequate succession planning strategies to ensure knowledge possessed by retirees is transitioned to incumbent knowledge workers. Increasing employee retirement presents a persistent shortage of DoD knowledge workers to combat threats (GAO-17-533T, 2017). The purpose of this qualitative single case study within a department in a DoD intelligence agency was to explore succession planning strategies that DoD managers may use to ensure knowledge possessed by retirees is transitioned to incumbent knowledge workers. Organizations may use the research from this study to gain an understanding of how knowledge assets increase productivity and profitability through sustainment of knowledge, which may increase the ability to gain or maintain a competitive advantage (Mageswari, Sivasubramanian, & Dath, 2016).

Conceptual Frameworks

The conceptual frameworks for this research consisted of the seven-pointed star model for succession planning and the four pillars of KM. Both conceptual models aligned with the purpose of the study to identify and explore succession planning strategies that DoD managers use to ensure the retention of retirees' knowledge. To remain competitive, employees and organizations must rethink and synchronize existing sources and capabilities (Ali, Sun, & Ali, 2017). Adding KM techniques with succession planning ensures transfer of knowledge as knowledge workers retire from the workforce.

Seven-pointed star model for succession planning. The process of succession planning deals with the ability of an organization to ensure that workers are recruited and trained to fill each key position in the organization (Akinyele, 2015). The seven-pointed star model provides a combination framework of succession planning and management that ensures stability of key personnel (Rothwell, 2005). The two goals of succession planning are to match the organization's present talent to the future talent and help the organization meet the operational and strategic challenges it faces (Rothwell, 2005). Strategic succession planning involves formulating and implementing a long-term plan that uses internal organizational strengths and future external environmental influences while reducing the current effects of internal weaknesses and future external threats (Rothwell, 2005).

The seven-pointed star model for systematic succession planning and management is the conceptual framework for succession planning. Although this framework focuses on the broader perspective of succession planning and management, it possesses concepts vital to succession planning and KM. The model flows through a process of an organization (a) making a commitment, (b) assessing present work and people requirements, (c) appraising individual performance, (d) assessing future work and people requirements, (e) assessing future individual potential, (f) closing the developmental gap, and (g) evaluating the succession planning program (Rothwell, 2005).

Succession planning occurs over time and is impacted by different events (Marler, Botero, & De Massis, 2017). The assessments throughout the seven-pointed star model ensure that leadership evaluates the workforce appropriately throughout the process. Managers must hire and retain people with aspirations to excel and a desire to further their careers as they progress (Salustri, 2016). Managers must also mentor younger and less-experienced employees (Murty, Sassen, & Kammerdiener, 2016). Emerging talent is difficult to find (Salustri, 2016) and competition to recruit senior knowledge workers grows as individuals move further along in their careers (Mathews & Blumentritt, 2015).

The seven-pointed star model for succession planning was developed out of an organization's need to maintain talent. Succession planning focuses on a process that determines future leaders (Barzinpour, Jafari, & Biuki, 2015) and requires an organizational culture that understands the value of pools of talents (Mehrtak et al., 2017). Succession planning is a continuous need to maintain a pool of qualified talent (West, 2016). Organizations use the planning process to ensure persistence of leadership in key positions, maintain and develop capital knowledge, and encourage individual development (Barzinpour, Jafari, & Biuki, 2015). Succession planning consists of job development activities that align with organizational objectives (Barzinpour, Jafari, & Biuki, 2015). The star model develops and maintains key talent.

Succession planning techniques. Spofford (2017) noted the seven best practice strategies for succession management are (a) talent management support; (b) talent assessment and succession planning practices; (c) performance appraisal performances; (d) incentive pay practices; (e) leadership development culture; (f) role-based leadership development, selection, and on-boarding practices; and (g) talent management return on investment. Organizations must implement these strategies based on the looming retirement wave across management levels and other key roles (Spofford, 2017). Succession planning strategies must meet the needs of individuals throughout the organization.

Succession plans should include four dimensions: (a) degrees of formality, (b) locus of decision-making, (c) scope of planning, and (d) identification and assessment of talent (Nissan & Eder, 2017). Degrees of formality is the extent to which an organization has documented a succession planning process, and locus of decision-making characterizes if an organization has a single leader or multiple leaders that need to be involved (Nissan & Eder, 2017). The scope of planning will determine whether succession planning is done for individual positions, a cohort of positions, or the enterprise at large (Nissan & Eder, 2017). The final dimension, identification and assessment of talent, assesses the talent pool against competencies and other criteria (Nissan & Eder, 2017).

Leaders must identify employee opportunities, develop employees' skills, and mentor employees (Kezar & Gehrke, 2017). Common succession planning practices that have worked in private industry are competency mapping, job rotation, and morale surveys (Sondhi & Nirmal, 2013). However, the assurance of knowledge transfer for succession is increased when knowledge workers have greater business exposure, individualized career development plans, belief in the mission, and management by objectives (Sondhi & Nirmal, 2013). An example is the human resources analytics tool adopted by major corporations, such as General Electric, Microsoft, International Business Machine Corporation, and Proctor & Gamble (Prokesch, 2017). Human resources analytic tools use applications with generic algorithm mapping to assess individuals and uncover potential opportunities (Prokesch, 2017).

Nonprofit organizations, including the federal government, ensure stability and sustainability through strategic succession planning. First, the organization's mission leadership works with human resources to adequately capture the succession planning issue and actively work to design a plan to mitigate the problem (Santora & Bozer, 2015). Then, leadership development initiatives and strategic hiring practices need to be implemented (Santora & Bozer, 2015) throughout the workforce.

Because succession planning grows tomorrow's leaders in today's environment, organizations must include techniques that groom employees to be critical and creative thinkers (Marques, 2015). Leaders in organizations, such as the DoD, cannot be taught to operate based on the hierarchic and bureaucratic structures of their predecessors because it negatively impacts progress by slowing decision making and delaying response times

(Marques, 2015). In today's dynamic environment, leaders need to be visionaries that gain knowledge and influence from an educated workforce (Marques, 2015). To meet the workforce needs, succession planning does not need to be complicated, but rather it needs to be an integration of fundamental principles of effective KM and succession planning techniques.

Four pillars of knowledge management. Stankosky and Baldanza (2000) provided a conceptual framework for KM, and Ternes (2011) validated the framework and found it to be applicable in today's business environment. The significance of KM has elevated it to its own academic discipline with associated theoretical constructs and principles (Stankosky, 2005). The four KM pillars—leadership, organization, technology, and learning—display the conceptual framework provided by Stankosky and Baldanza, which was validated by Calabrese with the identification of key elements for enterprise KM programs (Stankosky, 2005).

The four KM pillars are created with multiple disciplines. The leadership pillar contains business culture, strategic planning, climate, and growth (Stankosky & Baldanza, 2000). The organization pillar contains business process reengineering, metrics, management by objectives, total quality management, and business workflow (Stankosky & Baldanza, 2000). The technology pillar contains e-mail, online analytical processing, data warehousing, search engine, and communication (Stankosky & Baldanza, 2000). The learning pillar contains intuition, innovation, invention, learning community, and communications (Stankosky & Baldanza, 2000). Social, political, economic, and governmental influences also impact the KM environment (Stankosky & Baldanza, 2000).

The KM pillars provide the foundation for KM practices and processes. Researchers found a significant, positive relationship between the four pillars of KM and project management knowledge, especially in the areas of technology and organization (Oun, Blackburn, Olson, & Blessner, 2016). KM strengthens collaboration, improves communication, enhances employee skills, and increases product quality and services (Simsek, 2017). KM improves business practices, organizational systems, and overall team performance (Simsek, 2017). If organizations plan to obtain, maintain, and retain knowledge, then adequate KM implementation is required.

Knowledge management techniques. While the competitive advantages of organizations depend on effective KM, employees simultaneously engage in knowledge sharing and knowledge hiding (Peng, 2013). A cooperative-competitive relationship exists when sharing knowledge (Idrees, Vasconcelos, Ellis, 2018); however, knowledge sharing does increase interpersonal trust and organizational knowledge (Park & Kim, 2018). Employees share some explicit knowledge that is viewed as unimportant with colleagues, but individuals will withhold tacit knowledge that is vital (Peng, 2013). As a result, knowledge sharing strategies have become a popular aspect of management reform (Choi, 2016).

Researchers have established the need for a common approach to knowledge assessments (O’Brien, 2015). KM techniques or practices provide a process for collocating, codifying, and transferring explicit and tacit knowledge between individuals

(Al-Hakim & Hassan, 2013). Conceptualizations of KM strategies are based on the type of knowledge being transferred. The codification strategy involves extracting explicit knowledge and storing it in a knowledge database where it can be accessed by individuals (Al-Hakim & Hassan, 2013). The personalization strategy focuses on transferring an individual's tacit knowledge that has been developed over time and involves face-to-face contact for knowledge transfer (Al-Hakim & Hassan, 2013). This strategy creates interaction and information sharing among individuals (Al-Hakim & Hassan, 2013).

The personalization strategy is similarly known as the socialization KM strategy, which focuses on the exchange of tacit or local knowledge (Javernick-Will, 2013). This strategy is vital to knowledge workers, who typically work on project teams, because tacit knowledge is the most critical asset of a company (Dudek & Patalas-Maliszewska, 2016). These teams function by sharing large amounts of tacit knowledge but lack formal KM strategies that capture the knowledge (Javernick-Will, 2013).

Tacit KM techniques should be included in succession planning strategies in order to develop successors and establish business continuity (Lewis, 2013). Retirees often leave organizations with valuable organizational, customer, and project knowledge (Agarwal & Islam, 2015). The ability to retain organizational knowledge is critical for business success in a knowledge economy (Agarwal & Islam, 2015). The process of retaining tacit knowledge should be integrated into business operations well before key knowledge workers depart (Agarwal & Islam, 2015). A process for converting tacit knowledge consists of source identification, knowledge acquisition, formal recording, and classification of the knowledge (Dudek & Patalas-Maliszewska, 2016). In addition, elicitation techniques are visual, verbal, or written stimuli that encourage individuals to share and discuss topics that rely on tacit knowledge (Barton, 2015).

Knowledge transfer is a vital KM technique for succession planning. Transferring knowledge is defined as the passing of tacit information and processes from one individual to another (Byers, 2016). The circumstances under which an employee leaves an organization—including retirement, death, or voluntary departure—impacts the knowledge transferred to a successor (Byers, 2016). Employees and organizations benefit from knowledge transfer activities, but intangible knowledge loss occurs when leadership does not implement adequate processes (Byers, 2016).

Business process redesign is a foundational step in the establishment of successful KM (Manfreda, Buh, & Štemberger, 2015). A significant part of the redesign is incorporating knowledge sourcing, which is the ability to engage in searching, examining, transferring, and applying knowledge within the organization (Khedhaouria & Jamal, 2015). By using sourced knowledge found in the organization, individuals and teams will be able to gain lessons learned and progress forward with deeper understanding.

Balanced KM strategies rotate the work roles of employees within an organization to provide cross-training, balance demands and individual loyalties (Javernick-Will, 2013). Organizations are distributed systems in which knowledge is embedded in different communities and departments (Bosua & Venkitachalam, 2013). Balanced practices ensure employees have a holistic view of the organization and increases knowledge sharing (Javernick-Will, 2013).

Effective KM practices and processes are supported by information technology. Geographical collaboration constraints have been reduced through technology (Callaghan, 2017). The strategic alignment of information systems with KM strategies is an effective way for organizations to gain competitive advantage and improve performance (Dulipovici & Robey, 2013). KM systems support the creation, transfer, and application of knowledge (Dulipovici & Robey, 2013). Technology should be used to enhance the KM capabilities within an organization.

Although traditional practices were conducted individually, KM practices can be applied in groups such as communities of practice and knowledge networks which facilitate knowledge transfer and support innovation (Bosua & Venkitachalam, 2013). Group interaction requires negotiation, coordination, and consolidation before reaching a final outcome (Bosua & Venkitachalam, 2013). The process of engaging different perspectives increases the value of workgroups and the richness of knowledge (Bosua & Venkitachalam, 2013).

The implementation of KM in U.S. government facilities have shown an increase in productivity and a positive relationship in the growth of services (Mendoza, Bischoff, & Willy, 2017). For example, government facilities have realized benefits from using web-based tools that highlight interoperability, social networking, video sharing, and virtual applications (Mendoza et al., 2017). Enterprise applications are globally deployed and used as social software platforms between customers and partners (Mendoza et al., 2017). The overall goal of implementing KM techniques is to guarantee the experiences and expertise of employees are accounted for (Mendoza et al., 2017).

Topical Foundation

This section provided research on the foundation of the conceptual frameworks and holistically analyze succession planning and KM. The combination of succession planning and KM ensures knowledge is retained and transferred as organizations plan for the next generation workforce. This section also explored other implementation models/structures and incorporates how the concepts are applied to industry.

Succession planning. The concepts of succession planning and KM are critical to national security and the preservation of human lives since employee retention and their knowledge directly affects the success of the DoD’s mission. Organizations can experience leadership transition crisis without succession planning (Pila, Schultz, & Dachapalli, 2016). Succession is linked to organizational and team performances (Mathews & Blumentritt, 2015). The lack of succession planning can cause financial and operational turmoil (Perrenoud & Sullivan, 2016).

Despite the importance, succession planning continues to be a top workforce issue for government officials (Public Management, 2018). Business managers acknowledge the importance that succession planning has on the efficiency of mid- and long-term business operations (Salustri, 2016). The goal of succession planning is to ensure an effective and efficient workforce is continuously available with the ability to lead and develop competence (Marbury & Mayer, 2013). Researchers recommend linking succession planning to organizational and human resources strategy to improve employee satisfaction and overall business outcomes (Pila, Schultz, & Dachapalli, 2016).

Seniwoliba's (2015) succession planning research focused on unveiling the significance of planning to find strategies that design a comprehensive framework to monitor potential employees towards specific leadership and management positions. It noted that the process is time consuming and requires additional resources but the long-term gain for the organization is an essential investment in the its sustainment (Seniwoliba, 2015). The findings indicate that identifying employees involve analyzing the organizational chart for potential candidates, meetings and discussions with current leadership and potential candidates as well as human resources (Seniwoliba, 2015). The succession planning process requires deliberate engagement and planning with all parties involved.

Traditionally, succession planning has been a priority for high-level positions and its use in other roles has been reactive after an employee's departure (Kittscha, 2017). Succession planning can be modified according to the expectation of the organization to expand beyond key positions (Akinyele, Ogbari, Akinyele, & Dibia, 2015). Talent management develops and retains staff throughout the organization (Kittscha, 2017). The focus of tacit KM within a succession planning strategy will ensure organizational knowledge is retained and transferred to the next generation workforce for business continuity and future success. Leadership must remember that knowledge transfer between generations is critical for effective succession and continuity (Csizmadia, Mako, & Heidrich, 2016).

The requirement and structure for succession planning in the federal government is codified in 5 C.F.R. §412.202, *Systematic training and development of supervisors,* *managers, and executives.* According to the United States Office of Personnel Management (OPM) Workforce and Succession Planning Office,

> All agencies must provide for the development of individuals in supervisory, managerial, and executive positions, as well as individuals whom the Agency identifies as potential candidates for those positions, based on the agencies' succession plans. Agencies also must issue written policies to ensure they a) design and implement leadership development programs integrated with the employee development plans, programs, and strategies required by 5 CFR §410.201, and that foster a broad Agency and Government-wide perspective; b) provide training within one year of an employee's initial appointment to a supervisory position and follow up periodically, but at least once every three years, by providing each supervisor and manager additional training on the use of appropriate actions, options, and strategies to (1) mentor employees, (2) improve employee performance and productivity, (3) conduct employee performance appraisals in accordance with agency appraisal systems, and (4) identify and assist employees with unacceptable performance; and c) provide training when individuals make critical career transitions, for instance from non-supervisory to manager or from manager to executive. This training should be consistent with assessments of the agency's and the individual's needs. (5 CFR §412.202, 2012)

A key requirement for addressing the growing mission-critical skills gap that federal agencies face is successful talent management (Datt & Rivera, 2013). An effective talent management strategy is dependent upon stove piped human capital components such as recruitment and retention, learning and development, and succession planning (Datt & Rivera, 2013). To be successful in this area, federal organizations need to integrate enabling technology with processes, systems, and organizational data (Datt & Rivera, 2013).

An important aspect of talent management is succession planning because it identifies, develops, and prepares leaders to successfully operate the business (Church, 2014). Succession planning is a collection of various business practices and processes (Church, 2014) that are combined to ensure an effective and efficient workforce for future operations. The process assesses the future of employees within an organization in order to develop individuals (Handa & Garima, 2014). Entities should establish clear organizational goals and commit to learning from both leaders and employees (Lewis, 2013).

Succession planning enables a healthy business and working environment by identifying and setting goals necessary for business growth and continuity (Staehr, 2015). The incumbent workforce seeks understanding and control over business operations that the senior generation is reluctant to relinquish (Staehr, 2015). Organizations will experience duplication of efforts, a lack of integration, and longer learning curves for the incumbent workforce and employees without a strategy to transition duties.

There is an organizational necessity to have succession plans adequately map the supply of workforce talent against current and future business demands (Newhall, 2015). Succession planning must include leadership and the general workforce. Organizations must know the type, including leadership and skilled professionals, and amount of talent needed to meet mission goals (Newhall, 2015).

Researchers have found that managers do not have effective methods of succession planning; rather, managers view succession planning as a human resources department role and rely on those teams to plan for employee transition (Sibbald, Wathen, & Kothari, 2017). Without adequate succession planning, organizations experience short-term and long-term effects that negatively influence operations including interruption and compromise of services or operations (Raftery, 2013). Since an organization's appointment of a successor has a lasting impact (Santora & Bozer, 2015), the decision ultimately plays an essential role in the survival and feasibility of an organization (Raftery, 2013).

Leaders throughout organizations must see their role in implementing succession planning. Organizational leaders are reluctant to take on succession planning tasks because they do not believe it fits in the scope of their work (Shatilwe & Amukugo, 2016). Some leaders also perceive succession planning as an excessive cost that they do not have resources for (Shatilwe & Amukugo, 2016). Succession planning must be viewed as a required process for everyone in the organization and resources should be allotted within every budget center.

Succession planning in industries. Succession planning can be a daunting task, especially for small business owners. Small family-owned businesses have a vital role in national economic development and stability since they create more than half of the employment in some countries (Oudah, Jabeen, & Dixon, 2018). Approximately 30% of small family-owned business endure through a second generation (Mokhber et al., 2017). As owners and employees age, succession planning is critical for business continuity (Walker, 2018). Owners must be able to objectively review the company, ask appropriate questions, and formulate the right strategic plan (Lynch, 2015), especially since ownership usually relies on one individual (Belmonte, Seaman, & Bent, 2016).

Small business owners have the added task of considering family disharmony when thinking of the next generation of leaders (Reardon, 2018). When deciding on the next leader within a family, it is difficult to identify relatives with the same drive and commitment as well as other family issues that may delay the process (Reardon, 2018). The knowledge of business operations can be transferred easier than passion and vision for the company.

Libraries have been key to the preservation of knowledge and an essential channel to past, present, and future communication (Mishra & Ngurtinkhuma, 2015). Libraries of all types are planning for the replacement of key personnel. Library instructors are concerned with the challenge of passing institutional knowledge (Sobel & Drewry, 2015). In order to integrate succession planning into the curriculum of Schools of Library and Information Science, researchers suggest students interview managers in varies libraries to gain an understanding of responsibilities and to expand their professional network (Charbonneau & Freeman, 2016).

Librarian students are encouraged to analyze organizational charts of libraries to know key positions and their functions, develop mentoring relationships that will provide career partnership, examine job advertisements for awareness of different positions, build an expertise database to document staff knowledge, and create a succession plan that fosters knowledge transmission and training (Charbonneau & Freeman, 2016). Library demographics are changing, and succession planning is critical to future success (Charbonneau & Freeman, 2016).

The importance of succession planning in state health agencies in the United States have grown since 25% of the workforce plans to retire by 2020 (Harper, Leider, Coronado, & Beck, 2018). Researchers found that most state health agencies reported adherence to OPM’s succession planning regulations (Harper et al., 2018). The OPM standards were outlined above. The most common succession planning activities implemented were identification of long-term vision, alignment of core competencies and technical requirements for leadership, and development and learning strategies (Harper et al., 2018).

Due to the predicted shortage of experienced leadership in nonprofit organizations and their social significance, it is vital that succession planning happens within the next decade (McKee & Froelich, 2016). Nonprofits focus on succession planning for continuity of operations and stability in order to preserve institutional knowledge (McKee & Froelich, 2016). Nonprofit leadership tends to look internal to the corporation for successors which increases the need for employee development (McKee & Froelich, 2016). Succession planning efforts increase in in nonprofits when internal candidates are identified, interviewing skills are enhanced, and employee career paths are developed (McKee & Froelich, 2016).

Industries face a workforce shortage due to aging employees and future retirements (Titzer, Shirey, & Hauck, 2017). Public and private industries have acknowledged the significance and critical need of succession planning for the workforce. Government departments face a high loss of skilled employees with scarce talents (Pila, Schultz, & Dachapalli, 2016). Succession planning retains knowledge and transfers it to the next generation. It builds and retains employees in specialty areas (Kittscha, 2017). The succession process also shapes organizational actions and outcomes (Villadsen, 2016). The necessity of succession planning continues to grow, and industries must continue to implement effective strategies.

Knowledge management. KM complements succession planning by ensuring the retention of knowledge. The significance of KM has elevated it to its own academic discipline with associated theoretical constructs and principles (Stankosky, 2005). KM consists of three competencies – cognitacy (knowledge use and reasoning), kennacy (accumulation and organization of knowledge), and mediumacy (cognitive understanding of knowledge and practical skill) (Sisson & Ryan, 2016). These competencies describe KM and solidifies its developments.

KM is defined as a process and set of tools used to capture, share, and store knowledge (Sibbald, Wathen, & Kothari, 2016). KM consists of discovering, capturing, sharing, and applying knowledge to improve an organization (Cahyaningsih, Sensuse, Arymurthi, & Wibowo, 2016). The core KM principles for the federal government includes retaining, evaluating, retrieving, and sharing knowledge to increase collaboration and team building (Marbury & Mayer, 2013).

A purpose of KM is to transfer and retain information. KM provides managers with the ability to identify and organize the necessary information for skilled personnel as well as store data required to manage specific business responsibilities and projects, which will result in increased productivity and endurance (Asumptha & Mathan, 2016). KM can promote efficiency, learning competitive advantage, and innovation for enhancing succession planning (Asumptha & Mathan, 2016). KM is a means to innovation and performance improvement by leading to cost reduction and enhanced quality (Wu, Lin, Wen, Perng, & Hsu, 2016).

Knowledge workers are viewed as individuals whose job is to think for a living, which makes knowledge their main asset (Jennex, 2014). A knowledge employee possesses, accesses, creates, and applies knowledge to business operations to generate value for the organization (Jennex, 2014). Organizations use KM to capture employee knowledge and develop a process that will allow for high performance sustainment in an evolving environment (Behzadi, Isfandyari-Moghaddam, & Sanji, 2012).

The International Organization for Standardization (ISO) is an independent, non-governmental organization made up of 162 countries, which the United States is a member that adopts agreed upon standards for private and public-sector use (ISO, n.d.). In September 2015, ISO published an update to the Quality Management Systems Requirements standard, which added the key fundamentals of KM to quality management principles (Wilson & Campbell, 2016). The standard originated with DoD guidance from 1959 and morphed into an international guidance (Wilson & Campbell, 2016). The inclusion of KM highlights the need for knowledge to be incorporated in business practices.

The ISO guidance identifies the main elements of the KM cycle as creation and acquisition, capture and storage, and distribution and application (Wilson & Campbell, 2016). ISO guidance focuses on explicit knowledge because tacit knowledge is difficult to manage and incorporate with processes and systems; however, the standard connects competence to tacit knowledge which is based on training and experience (Wilson & Campbell, 2016). The connection to tacit knowledge highlights the significance of an individual's hands-on experience.

The incorporation of KM is a more difficult challenge for organizations in the public sector, such as DoD, in comparison to those in the private sector (Massaro, Dumay, & Garlatti, 2015). The implementation difficulty has been the specific labor divisions or specialized skill sets of the workforce that requires distinctive knowledge sharing mechanisms (Massaro et al., 2015). Furthermore, KM is specific to the organization and in the public sector there are different levels of accountability, responsibility and responsiveness (Massaro et al., 2015).

Military KM is a major resource and must be managed as a vital war fighting tactic (Cooper et al., 2016). Military logistics are dependent upon KM strategies to ensure sound decisions are made with minimum risk (Cherry, 2014). Knowledge is a strategic resource that should be integrated to achieve competitive advantage (Cherry, 2014). The four mechanisms for knowledge integration are transfer, direction, sequencing, and routine (Cherry, 2014).

Knowledge. The most confusing part of KM is the word knowledge (Mohajan, 2017). Knowledge develops from data, information, and previous knowledge (Mohajan, 2017). A formal definition of knowledge is information and skills acquired through experience and education (Kanjere, 2016). Knowledge provides value to organizations by increasing the entities ability to achieve sustainable competitive advantage (Randall, Nowicki, Deshpande, & Lusch, 2014). Value is formed through a knowledge worker's direct application of knowledge and skill (Randall et al., 2014), thereby displaying the importance of a knowledge worker to the success of an organization (Schlechter, Thompson, & Bussin, 2015).

Knowledge is a strategic resource for an individual and an organization (Tiwari, 2015). An organization's knowledge is a critical asset for improving performance, increasing profitability, and enhancing competitive advantage (Cooper et al., 2016). Knowledge should be viewed as an intangible asset that requires skilled management (Allameh, Pool, Jaberi, & Soveini, 2014). Organizations benefit from a knowledge worker's ability to use explicit and tacit knowledge to complete daily business operations. The ability to apply and share knowledge has a direct effect on performance (Allameh et al., 2014).

Tacit knowledge is the internal know-how and competences that an individual possesses (Bednarska & Olszewski, 2013). People acquire tacit knowledge individually or in the process of learning by doing (Panahi et al., 2013). Tacit knowledge is the information in an individual's mind that has deeply grounded their actions and experiences (Panahi, Watson, & Partridge, 2013). In contrast, explicit knowledge is defined as the articulated, written down, or published academic knowledge found in books, manuals, papers, or other tangible sources (Panahi et al., 2013). Explicit knowledge is recorded and stored for organizational use (Allameh et al., 2014).

Organizations must focus on the sustainment of tacit knowledge because it significantly affects organizational success and the information is difficult to duplicate and transfer (Bednarska & Olszewski, 2013). The only way to acquire tacit knowledge is through practice and observation (Bednarska & Olszewski, 2013). Tacit knowledge is practice and experience expressed through professionalism and skills (Dudek & Patalas-Maliszewska, 2016). Nonaka and Takeuchi's SECI model for knowledge conversion is well-established in the KM field and provides a strategy to convert tacit knowledge to explicit knowledge (Burnett, Macafee, & Williams, 2017). The SECI model of organizational knowledge creation asserts that new knowledge is created through the continuous conversion of tacit and explicit knowledge (O'Brien, 2015).

All knowledge is not documented; thereby, making knowledge workers necessary to address specialized questions that require tacit knowledge (Hariharan, 2015). Managers are required to understand the knowledge of their workers and enable the exchange of tacit knowledge to meet mission needs (Whisnant & Khasawneh, 2014). Managers must be aware that tacit knowledge transfer requires a process of development and preparation of the knowledge workers (Whisnant & Khasawneh, 2014). Without knowledge transfer, there exist operational risks including longer learning curves, the inability to integrate programs, and duplication of effort. The management of knowledge workers' information aids innovation because the data provides a systematic approach of knowledge flow when needed to create organizational value (Behzadi, Isfandyari-Moghaddam, & Sanji, 2012).

Knowledge management in industries. Within the construction industry, program managers highlight knowledge as a fundamental key to success (Burger & Zulch, 2018). The combination of project management knowledge (the nine generic KM elements: integration, scope, time, cost, quality, human resources, communication, risk, and procurement management as well as construction-specific management areas), technical industry knowledge (construction science, finance/cost, construction processes, and design processes), and experience enables effective management and efficient project execution (Burger & Zulch, 2018). Researchers propose an integrated circle model that centers around effective project KM with technical industry knowledge and experience expanding the outer circles that feed into the core knowledge foundation (Burger & Zulch, 2018). Companies using this model relies on its personnel knowledge to build out their KM processes.

An Indian electric company has implemented an enterprise global KM model that consisted of a socio-technical environment with value adding procedures, and elements that infuse the company's vision with strategic orientations, infrastructures, generic KM, and organizational learning processes (Rana & Goel, 2018). The socio-technical environment uses tools and techniques with social system components such as knowledge and attitudes to increase economic performance (Rana & Goel, 2018). Generic KM outlines the organization's knowledge and how the information increases the organization's capital while organizational learning consists of enhancing individual competencies through training and other processes (Rana & Goel, 2018). This model implements KM strategies that transfer knowledge within the organization and enhances a self-sustaining organization.

Arts and crafts organizations acknowledge the integral connection between tacit knowledge and one's performance for competitive advantage (Latilla, Frattini, Petruzzelli, & Berner, 2018). The tacit knowledge gained through the experience of craftsmen and the skill of craftsmanship were overlooked due to the previous focus on technological paradigms and standardized results (Latilla et al., 2018). Recent research has shifted focus to acknowledge the key role that craftsmen play in the industry and will continue to enhance ways to transfer tacit knowledge.

Research indicates that a holistic KM strategy promotes gathering and utilizing data in a systematic framework (Laihonen & Mäntylä, 2018). Hence, strategic KM in local government consists of alignment with strategy, integration into the general management system, clear processes and responsibilities for refinement, and data guarantee (Laihonen & Mäntylä, 2018). The alignment with the local government's strategy and incorporation into the overall management system adds to the holistic paradigm.

Topical Analysis to DoD and Knowledge Workers

The purpose of this study was to explore succession planning strategies that DoD managers may use to ensure knowledge possessed by retirees is transitioned to incumbent knowledge workers. Knowledge workers are individuals who apply productive work ideas, concepts, and information rather than manual skill; examples include computer scientists, cybersecurity analysts, engineers, information technologists, doctors, and lawyers (Schlechter, Thompson, & Bussin, 2015). These highly skilled employees play a vital role in the organization’s mission.

The DoD is the oldest and largest government agency in the United States (DoD, 2015). To support DoD’s mission to provide the military forces needed to deter war and to protect U.S. security, the DoD employs over 1.3 million active duty military personnel and 742,000 civilian personnel (DoD, 2015). The government’s complex and dynamic work environment requires knowledge workers to possess mission-critical skills to serve the public cost effectively and achieve mission results (GAO, 2015). With a workforce of this magnitude and a mission to prevent catastrophic tragedies, it is vital for the DoD to retain knowledge and plan for future operations because current trends threaten to increase the skills gaps of the workforce (GAO, 2015).

Due to depleting budgets and resource constraints, the DoD must transfer and retain tacit knowledge effectively to ensure mission survival and growth (Agarwal & Islam, 2015). If not done, the loss of knowledge workers will reduce organizational knowledge (Jennex, 2014). Knowledge provides organizations with a competitive advantage in today’s economy (Pipatanantakurn & Ractham, 2016). Thus, knowledge retention is considered crucial for long-term organizational success (Agarwal & Islam, 2015).

In February 2017, the United States GAO reported that the federal government is one of the world’s largest and most complex entities with approximately a $3.9 trillion budget in the 2016 fiscal year (GAO, 2017b). Since the start of the 21st century, strategic human capital management has been a high-risk area for the federal government (Datt & Rivera, 2013). As the largest government agency in the United States of America (DoD, 2015), the DoD has more human capital risk than other government entities. The DoD Logistics Human Capital Strategy highlights the need to align human capital with business processes and goals across the enterprise (Cooper, Huscroft, Overstreet, & Hazen, 2016).

Employees are critical to an organization because they apply their knowledge and perform the mission. The human capital resource is the knowledge that an individual embodies and contributes to an organization (Obedgiu, 2017). The nation's highest human capital risk is posed by the workforce with mission-critical skills gaps such as occupations in cybersecurity, acquisition, technology, or mathematics (GAO, 2017b). Without an effort to develop and retain employees, organizations lack skilled talent and risk high attrition costs (Downs, 2015). The mission-critical skills possessed by knowledge workers who are highly trained must be retained to contribute to the daily operations and success of the federal government.

The OPM mission is to lead the efforts to recruit and retain a world-class workforce for the federal government (OPM, n.d.). In February 2016, OPM issued regulations to revise 5 CFR part 250, subpart B, Strategic Human Capital Management which provides guidance concerning workforce and succession planning along with a new Human Capital Framework (HCF; 5 C.F.R. §250, 2016). The regulation aligns Strategic Human Capital Management to the Government Performance and Results Ac t Modernization Act of 2010 (Pub. L. 111-352; 5 C.F.R. §250, 2016).

OPM leadership provided revised guidance for the HCF consolidated Leadership and KM into Talent Management. HCF integrates four human capital systems—Strategic Planning and Alignment, Talent Management, Performance Culture, and Evaluation (5 C.F.R. §250.203, 2016). OPM policy notes that organizations should use talent management systems to

> promote a high-performing workforce, identifies and closes skill gaps, and implements and maintains programs to attract, acquire, develop, promote, and retain quality and diverse talent. The standards for the talent management system require an Agency to
>
> plan for and manage current and future workforce needs;
>
> design, develop, and implement proven strategies and techniques and practices to attract, hire, develop, and retain talent; and
>
> make progress toward closing any knowledge, skill, and competency gaps throughout the Agency. (5 C.F.R. §250.203, 2016)
>
> [Note: Researchers have found the terms talent management, talent strategy, succession management, human resource management, and human resource planning used interchangeably (Kalaiselvan & Nachimuthu, 2016).]

Despite emphasis on the human capital need, researchers found nonprofits, such as government entities, to display a notable disconnect between the perceived importance of succession planning and actual actions taken to achieve the goal (Besel & Pico, 2017). To ensure implementation, organizational leadership must be educated of the importance of succession planning and enforce implementation throughout the workforce. Entities within the federal government must use the HCF as guidance to ensure a consistent workforce that will be able to perform at the highest level.

Federal agencies, including DoD, have been granted flexibility and individual authority through federal policy to manage their workforces (GAO, 2017b). GAO suggests that strategic human capital planning be the centerpiece of federal agencies' efforts to transform organizations to meet management challenges and ensure agencies have the talent needed to meet its mission (GAO, 2013). GAO also recommends that OPM increase assistance to federal agencies for development of processes to improve mission-critical skill gaps in the workforce (GAO, 2017b). Federal agencies must enforce their authority to ensure strategic human capital plans are developed to mitigate knowledge loss as employees retire.

The United States Office of Management and Budget stated that the federal government faces a persistent shortage of knowledge workers to implement security protections to combat cyber threats (GAO, 2017a). The United States is dependent upon the mission-critical skills of knowledge workers to implement, secure and maintain federal systems (GAO, 2017a). Specialty practice areas require additional time and training of employees (Doss-McQuitly, 2017). Hence, it is imperative for the DoD to actively succession plan for knowledge workers and incorporate tacit KM techniques into the strategy to adequately retain and transfer knowledge within the workforce. Establishing a culture of developing knowledge workers will provide an established pool of talented individuals to draw from (Hardie, 2015).

Generations. The current workforce consists of a mixture of generations and the need for succession planning has increased as a significant portion of baby boomers leave the workplace. Baby boomers were born between 1946 to 1964 and are retiring over the next several years (Trossman, 2015). In the late 1980s and early 1990s, some industries saw a hiring wave as baby boomers entered the workforce but are now currently experiencing high turnover rates (Clark, 2015). To ensure continuity of operations, skilled employees need to fill the positions of baby boomers.

Employers must plan for the changes in the workforce and train the next generation of employees. The generation after baby boomers are as Generation Xers, which were born roughly between 1965 and 1983, and Generation Xers are half the population size of baby boomers (Trossman, 2015). An increase in workforce planning is required because there are less Generation Xers to fill baby boomer positions (Trossman, 2015).

Other members of the workforce are millennials. Millennials are defined as individuals born between 1980 and 2000 and are expected to make up half the workforce by 2020 (Kosterlitz & Lewis, 2017). Millennials are the most ethnically diverse generation (Kosterlitz & Lewis, 2017). Management must unify the knowledge of the previous generations with the innovation of millennials for successful business operations (Kosterlitz & Lewis, 2017). Succession planning is vital to bridging the knowledge gap between generations.

Organizations must consider generational differences when succession planning. Generations have different behaviors, values, styles, and work ethics (Acree-Hamann, 2016). However, work ethic and job engagement were found to be universal values for all generations (Munde & Coonin, 2015). Planning for varied characteristics increase the complexity of succession management in a dynamic work environment (Acree-Hamann, 2016). Nonetheless, organizations must continue to implement succession planning that meets the needs of everyone in the workforce.

Job satisfaction. Succession planning with effective knowledge transfer techniques will increase workforce knowledge allowing employees to perform at a higher skill level, thereby enhancing job satisfaction and employee retention. Job satisfaction is defined by whether an employee likes their job (Lee, Hom, Eberly, & Li, 2018). Turnover is reduced when employees enjoy what they are doing and possess organizational commitment (Lee et al., 2018). Self-efficacy, an individual's perception of their capability to perform successfully, correlates to work commitment and job satisfaction (Chu, 2018).

Poor leadership, lack of a career path and promotion opportunities, unfair treatment, and lack of purpose leads to unsatisfied employees (Belasen & Belasen, 2016). When management does not address the employees' emotional aspect of satisfaction, feelings of abandonment develop and performance is negatively impacted (Belasen & Belasen, 2016). This reinforces the fact that job satisfaction directly influences productivity.

Satisfied employees are motivated to remain productive members of organizations longer. Job satisfaction increases productivity, reduce turnover rates, and enhance organizational efficiency (Chu, 2018). Employee productivity directly relates to job fulfillment (Zhou, Wang, Tsai, Xue, & Dong, 2017). Employees do not perform well if they do not have job satisfaction (Fusch & Fusch, 2015). Succession planning creates sustainable career paths (Caleb, 2015). Employees who have a plan and are fulfilled remain in the organization longer as well as perform at a higher level.

An individual's motivation directly impacts job satisfaction. Researchers have found that an important job satisfaction determinant is employee motivation (Djordjević, Petrović, Vuković, Mihailović, & Dimić, 2015). The loss of motivation negatively impacts employee satisfaction and performance (Octaviannand, Pandjaitan, & Kuswanto, 2017). Motivated employees are driven and will perform at a higher level because they are self-driven.

Leaders can use employee satisfaction to enhance their organization. Analysis of job satisfaction can lead to organizational issues and management problems as well as improvement measures (Zhou et al., 2017). Leaders play an important role within an organization and impact job satisfaction (Inceoglu, Thomas, Chu, Plans, & Gerbasi, 2018). Poor leadership can lead to low job satisfaction.

Employee retention. The necessity for succession planning is enhanced if organizations desire to retain its workforce because the process allows employees to transfer knowledge and perform at the next skill level. The workplace continues to face difficulties in recruiting and retaining qualified employees since there exist a phenomenon in workforce migration (Ruginosu, 2014). Although approximately 30% of the workforce is eligible to retire (Datt & Rivera, 2013), there is a lack of effective and efficient succession planning strategies for the workforce. Hence, it is vital for DoD to retain and use the knowledge of its workforce to ensure continuity of operations and maintain competitive advantage over the adversary.

Employee loyalty and turnover are significant management challenges impacted by employee commitment and competition for capable talent (Johennesse & Te-Kuang, 2017). Because employing and retaining suitable talent is critical for an organization, employee recruitment and retention processes are key cost saving mechanisms (Johennesse & Te-Kuang, 2017). Managers should have an increased focus on employee retention for reasons of quality service and business continuity (Brannan, 2015).

Organizations spend excessive amounts of resources recruiting new employees who do not fit the required special skill set, which can result in low performance and high, costly turnover (Craig, 2015). For example, if the average salaried employee earns an annual salary of $50,000 per year, then the cost of turnover is $75,000 per employee (turnover cost 150% of an employee's salary; Enslin & Schulz, 2015). Organizations should develop existing employees and focus on retaining its current workforce (Craig, 2015). Succession planning for the workforce will allow organizations to train and retain junior level employees as senior level employees move into retirement. This helps to alleviate the two basic problems and trends with talent management, which are shortage of talent and motivation of employees (Craig, 2015).

Enhancing human capital management strategies will enhance employee engagement, reduce employee turnover, and increase employee loyalties (Enslin & Schulz, 2015). Satisfied employees are dynamic, resourceful, and more likely to be retained by the company (Rose & Raja, 2016). The departure of key employees could cause significant delays or lead to an organization missing crucial opportunities (Younge & Marx, 2016). An individual’s departure from a company may also affect the organization’s collective expertise since value its value is tied to colleagues (Younge & Marx, 2016).

A 2016 survey that examined talent management in organizations measured talent constraint versus cost impact and found Chief Executive Officers identified that talent related expenses rose 43% more than expected (Kalaiselvan & Nachimuthu, 2016). More than 40% of the Chief Executive Officers surveyed identified that it was becoming more difficult to hire skilled workers (Kalaiselvan & Nachimuthu, 2016). The survey results revealed the value and shortage of skilled workers which increases the need to properly train and retain the current workforce. Skilled workers know there is a tight labor market and are willing to move on from a corporation that does not meet their needs, most within 5 years (Craig, 2015). As a result, more than 50% of corporations have dedicated to making changes to their talent management strategies (Kalaiselvan & Nachimuthu, 2016).

Some human resource departments are moving beyond traditional functions to provide value to human capital management, including enhanced succession planning, tacit and explicit knowledge transfers, and retention strategies (Arora, 2014). Effective retention strategies begin with a good hiring process of, and continues throughout, the employee’s lifecycle (Rodarte, 2017). Retention strategies include retention interviews with high performers to assure employees know their value and are able to discover how the organization can successfully support them (Arora, 2014). Career mentoring is another retention strategy which is positively related to an employee's perception of organizational support and the employee's organizational commitment (Enslin & Schulz, 2015). Employees with high levels of organizational support are less likely to leave the organization (Enslin & Schulz, 2015).

Generational traits should also be considered when analyzing employee retention within organizations. For example, millennials are viewed as employees who are not loyal to a company but loyal to the job in addition to, technology savvy, fast learners who enhance the efficiency of organizations (Aruna & Anitha, 2015). Millennials challenge organizations to manage their talents effectively, create new opportunities, provide increased work life balance, and offer a chance to be involved in the decision-making process (Aruna & Anitha, 2015).

Local governments face many challenges in attracting and retaining qualified millennials since they think differently than previous generations (Lawson, 2017). When focusing on employee retention efforts, there should be focus on enhanced work life integration with alternative work methods, revamping of employee development, focus on recruitment with mobile-friendly websites, update the physical work environment, and encouragement of the use of social media to promote the organization (Lawson, 2017). Millennials are the future of organizations and effective planning is required to ensure successful continuity and growth.

Succession and corporate social responsibility. Corporate social responsibility reduces the immediate succession planning need because employees desire to serve longer in their career. Employee retention provides corporate continuity and community stability (Rodarte, 2017). Research suggests a positive relationship between an organization’s corporate social responsibility investments or discretionary corporate activities that enhance social welfare and employee retention (Carnahan, Kryscynski, & Olson, 2017). For example, organizations with high corporate social responsibility involvement have reduced investment inefficiency (Benlemlih & Bitar, 2018). Employees are less likely to leave an organization because there is a sense of meaningfulness that increases the individual’s identification to the organization (Carnahan et al., 2017). There is also an increase in the employee’s purpose at work (Carnahan et al., 2017). Self-gratification will retain employees for longer periods of time.

Employees gain purpose through corporate social responsibility and organizations benefit as well. Corporate social responsibility is the relationship between business and society (de Graaf, 2016) which merges economic, ethical, legal, and philanthropic efforts into corporate operations (Watson, 2015). It encourages organizations to account for environmental, social, and economic factors (Hickle, 2017) due to moral responsibilities to their sector (Herzog, 2017) and advance social good beyond what is required (Charles, Germann, & Grewal, 2016). Organizations that implement corporate social responsibility into their business strategies benefit from stakeholder approval for business operations, improvement in resource efficiency, and an increase in their competitive advantage (Moratis, 2016). Corporate social responsibility is grounded in moral issues and driven by the demands of stakeholders and the broader society (Moratis, 2016). It is being steadily growing as part of an organization’s mainstream functional area (Moratis, 2016).

Employee volunteerism is a corporate social responsibility practice that strengthens employee satisfaction and increases employee retention as well as externally enhances corporate reputation (Cycyota, Ferrante, & Schroeder, 2016). Employer-supported volunteerism is active support given by an employer to an employee who is volunteering with charitable organizations (Cycyota et al., 2016). Employees are motivated by employer-supported volunteerism because it provides altruism, organizational citizenship, role variety, relational and social task characteristics, networking, and other personal gratifications (Cycyota et al., 2016). These motivations are extremely evident for the Millennial generation (Cycyota et al., 2016) which is the incumbent DoD workforce.

Although government corporate social responsibility is viewed as counter-intuitive to many (Vallentin, 2015) it is being embraced by industry as well as the government. Nations have begun national legislative initiatives (Subramaniam, Kansal, & Babu, 2017) and government systems worldwide have embraced the concept to address and guide an organization's social responsibility (Dentchev, Balen, & Haezendonck, 2015). For example, the United Nations encourage positive principles for human rights and labor standards through the United Nations Global Compact initiative (Dentchev et al., 2015). Some international government organizations have extensive and innovative corporate social responsibility programs while others are considering government policies (Knudsen & Brown, 2015).

Although the concept of corporate social responsibility has grown due to institutional pressures for responsible business practices (Habaragoda, 2017), some stakeholders contest it because they acknowledge that social responsibility claims are driven by multiple motives and open to interpretation based on one's perspective (Skilton & Purdy, 2017). Organizations and stakeholders have fundamental disagreements over who benefits most from corporate social responsibility (Skilton & Purdy, 2017). However, it is in an organization's interest to integrate social issues to ensure sustainable development and meet stakeholders' expectations for the investment (Baraibar-Diez & Luna Sotorrío, 2018).

Transition

In this section, I provided a synopsis of the business need for succession planning with KM strategies for retiring DoD knowledge workers. In Section 2 of this study, the purpose statement highlights the necessity for the research and outline the components of the case study design such as the role of the researcher, research method and design, and the collection and analysis of data. In this qualitative study, I explore the phenomenon of successful succession planning strategies and provide a better understanding of how KM can improve succession planning processes. In Section 3, I present the findings of the study, address how this research applies to professional practice, focus on the implications of social change, and make recommendations for future research.

Section 2: The Project

In Section 2, I present the critical elements necessary for this qualitative case study. Section 2 includes the role of the researcher, participants, research method, research design, population sampling, ethical research, data collection instruments, data collection techniques, data organization techniques, data analysis, and the reliability and validity of the study. The information in this section increases the understanding of succession planning strategies that DoD managers use to ensure successful knowledge possessed by retiring senior knowledge workers is transitioned to the incumbent workforce.

Purpose Statement

The purpose of this qualitative single case study within a department in a DoD intelligence agency was to explore succession planning strategies that DoD managers may use to ensure knowledge possessed by retirees is transitioned to incumbent knowledge workers. The population included six DoD managers from science, technology, engineering, and math (STEM) departments and cyber intelligence agency departments located in the Baltimore-Washington, D.C., area, who successfully implemented succession planning for senior knowledge workers. Succession planning with effective knowledge transfer techniques could increase DoD managers' knowledge, allowing employees to perform at a higher skill level and enhancing job satisfaction and employee retention. The implication for positive social change includes the potential for increased agency continuity by improving employee retention, which may enhance organizational and community relationships through the prosperity of knowledge workers.

Role of the Researcher

The researcher is the primary research instrument used for data collection and must avoid bias throughout the research process by limiting perceptions and subjectivity (Cope, 2014). Within this case study, my role as the researcher was to collect data gathered from DoD managers on succession planning strategies used for senior-level knowledge workers and maintain the researcher-participant relationship. Ross (2017) stated that researchers must remain cognizant of the benefits and challenges of the participant’s position and counter the negative impact (Ross, 2017). The benefits relate to establishing rapport with participants, capacity for empathy, and the personal emotional growth and learning experienced (Ross, 2017). The challenges are how the emotional investment in the researcher-participant relationship will influence the researcher as the research instrument, managing appropriately boundary relationships, and making decisions about self-disclosure (Ross, 2017).

As a DoD employee who shares knowledge comparable to that of the participants in this study, I have served in similar capacities as DoD managers; however, no one in my direct chain of command participated due to the potential conflict of interest. Participants did not have a reporting relationship nor did they have a supervisory or power relationship influencing their participation. I have served the DoD for over 10 years and had access to knowledge workers in other departments. I did not engage participants for whom a reporting or influencing relationship existed.

During the research process, I followed the ethical practices outlined in the Belmont Report. The report indicates that equals should be treated equally (Brody, Migueles, & Wendler, 2015). The Belmont Report provides responsible research conduct involving human subjects and makes a distinction between research and practice (Kowalski, Mrdjenovich, & Hutchinson, 2017). The four key principles to ethical research are embodying ethical action, respecting participants, generalizing beneficence, and negotiating justice (Bromley, Mikesell, Jones, & Khodyakov, 2015). To ensure principles were met, I ensured informed consent and confidentiality, was respectful of participants, ensured awareness that participation was voluntary, and conducted member checking.

To mitigate researcher bias, all interviews were documented, transcribed, and reviewed by participants for validity prior to conducting analysis and establishing findings. I used member checking to enhance data reliability and validity. Member checking involves systematic feedback from participants on data collected, interpretations, and conclusions (Lub, 2015). Interviews are also a method used for data saturation (Fusch & Ness, 2015). Data saturation or thematic saturation is the point at which no new insights, themes, or issues are identified (Hagaman & Wutich, 2017). I conducted interviews and reviewed documents until data redundancy was achieved.

Appendix A includes the interview protocol for this qualitative case study. Interviews are a data source that allows participants flexibility to describe their experiences in person, which is a strategy used by case study researchers (Barreto & Martins, 2018; Payne et al., 2017). Interviews also allow the researcher to gain insight into the management gap and improve communication between participants (Farrell, 2015). The interview protocol ensured each interview was conducted using a standard, repeatable process. I conducted in-person one-on-one interviews with participants and used Walden University approved disclosures and protocols outlined by the institutional review board.

Participants

In case studies, individual participants are the basic unit of knowledge (Fishman, 2016). The criteria for participants in my study included (a) managers of knowledge workers in cyber, technology, and engineering departments in the Baltimore-Washington, D.C. area; (b) participants who manage senior-level employees; and (c) individuals must have conceptually defined or implemented succession planning strategies within their department to ensure knowledge possessed by retirees was transitioned to incumbent knowledge workers. Participant selection in qualitative research is grounded in information gathering and analysis methods (Cleary, Horsfall, & Hayter, 2014). In this study, I used participant knowledge to gather information and explore succession planning in knowledge workers.

DoD leadership acknowledged the importance of employee participation in this study to gain a full understanding of the business problem. Researchers have also found that a variety of perspectives is gained from participants (Seymour et al., 2015). DoD representatives signed an institutional review board (IRB) authorization agreement with Walden University, so I had access to participants for this study. As a long-term DoD employee and federal civil service employee, I had access to participants throughout DoD at various stages in their career. I worked with the DoD's human resources and research departments to identify participants based on the described eligibility criteria.

I established a working relationship with participants through the interview process. Interviews are useful for gaining insight into a gap and improving communication between partners (Farrell, 2015). Participants were asked *what* style of case study research questions, which are best for interpretive inquiry (O'Brien, 2015). The strategy included providing history of the subject in writing and verbally as well as explaining the necessity to document the interview.

Participant characteristics aligned with the overarching research question, which explored succession planning strategies used by DoD managers. The participants' eligibility criteria ensured alignment. During interviews, managers described succession planning strategies used to ensure knowledge possessed by retirees is transitioned to incumbent knowledge workers.

Research Method and Design

A qualitative single case study was the research method and research design for this study. This enabled me to explore the phenomenon of successful succession planning strategies used by DoD managers to ensure knowledge possessed by retirees is transitioned to incumbent knowledge workers. A case study design consists of in-depth inquiry into a real-world problem (Yin, 2013). My case study included a real problem of a phenomenon.

Research Method

Multiple methods of research were considered for this study, including mixed method, qualitative, and quantitative. I used the qualitative method to explore the phenomenon of succession planning strategies used by DoD managers for senior knowledge workers. Researchers use a qualitative method to explore data with meaning from participants to understand a phenomenon (Simons, 2013). Researchers understand that a quantitative methodology investigates a hypothesis based on a phenomenon (Simons, 2013). The mixed method combines qualitative and quantitative approaches (Zadrozny, Mcclure, Lee, & Jo, 2016). I did not investigate hypotheses based on the phenomenon, and therefore, I did not use a quantitative or mixed method.

I did not test hypotheses about variables’ relationships or differences, which is part of a quantitative study or the quantitative portion of a mixed-method study. Qualitative researchers use a holistic strategy and inductive reasoning to understand a phenomenon (Dasgupta, 2015). The use of a qualitative method ensured important context and insights on the succession planning for senior knowledge workers by DoD managers.

This qualitative research explored issues and concerns behind succession planning strategies used by DoD managers for STEM knowledge workers. Researchers use qualitative studies to explore a phenomenon related to conceptualizing and implementing succession planning strategies for knowledge retention and transfer. Rodarte (2017) found qualitative research beneficial in exploring succession planning strategies used by

Air National Guard leaders to retain skilled workers. Likewise, Connell (2013) used qualitative research to explore employees' perceptions of knowledge sharing in the DoD.

Qualitative research provides flexibility to understand and describe the phenomenon to produce meaningful interpretations of the data. The value of qualitative research is recognized through the creation of new knowledge on a topic that provides an understanding of emerging issues in the discipline of management studies (van den Berg & Struwig, 2017). Researchers use qualitative research to investigate phenomena through the collection of a variety of empirical materials, including personal experiences and interviews (Kumar, Sachan, & Mukherjee, 2017). This method allows for broad and rich descriptions as well as sensitivities of ideas and meanings (Kumar et al., 2017).

Research Design

The value of qualitative research is found in its rigorous, structured research designs (van den Berg & Struwig, 2017). The three qualitative research designs that I considered for my study were case study, phenomenology, and ethnography. Phenomenology is a philosophical movement to study a phenomenon and to explore the meanings of lived experiences of participants (Gill, 2014). A phenomenological design was not appropriate because I was not seeking to explore the meanings of participants' lived experiences. Ethnography is a research design used to identify and explore stories of culture and customs of people (Mannay & Morgan, 2015). I did not select an ethnographic design because I was not seeking to study groups' or societies' cultures.

I used a single case study design to provide a detailed and intensive analysis of the phenomenon. Researchers use *what* styles of case study research questions, which are good for interpretive or exploratory inquiry (O'Brien, 2015). I explored the phenomenon of successful succession planning strategies within the context of retiring DoD knowledge workers. Researchers use case studies to investigate a real-life phenomenon within its environmental context (Ridder, 2017). Single case studies can lead to the identification of patterns and relationships or creating and extending a theory (Ridder, 2017).

Case study research involves a large amount of subjective data (Larrinaga, 2017). Researchers must continue to collect personal data from participants until data saturation is reached. Fusch and Ness (2015) stated that data saturation is achieved when researchers receive enough information to replicate the study, when the ability to gain new information has been attained, and when no further coding is feasible. Data saturation is defined as data adequacy, which means no new data can be obtained (Hancock, Amankwaa, Revell, & Mueller, 2016). Interviews were conducted until data saturation was achieved.

Population and Sampling

Researchers conduct single case studies with purposeful sampling when exploring unusual cases or when a rare observable phenomenon is investigated (Ridder, 2017). I used purposeful sampling to select six participants, who were knowledge worker managers in STEM and cyber departments within a DoD agency in the Baltimore-Washington, D.C. area. A sample size of six to 10 is adequate for case study research (Rodarte, 2017).

Researchers have agreed that combining different data collection methods will confirm data saturation and transparency (Hancock et al., 2016). Methodologists define data saturation or thematic saturation as the point at which no new insights, themes, or issues are identified (Hagaman & Wutich, 2017). Data saturation was achieved through multiple data collection methods in my study. I continued to collect and analyze data using multiple methods until I reached data saturation or a point where new information was no longer being obtained.

The criteria for participants in this study included (a) managers of knowledge workers in cyber, technology, and engineering departments within the Baltimore-Washington area, (b) participants must manage senior-level employees, and (c) individuals must have conceptually defined or implemented succession planning strategies within their department to ensure knowledge possessed by retirees was transitioned to incumbent knowledge workers. The participant selection is at the discretion of the researcher if the objectives of the case study are met (Yin, 2014). I selected participants based on the described criteria and conducted interviews in DoD office space.

Ethical Research

Good research should always be ethical with the goal to advance knowledge (Walton, 2016). Researchers enter personal and moral relationships with participants and must protect participants' rights (Walton, 2014). Researchers conduct data gathering in accordance with ethical protocols such as informed consent and confidentiality (Brewis, 2014). Ethical research ensures participants take part willingly and receive informed consent throughout the entire interview process (Walton, 2016).

Participants must have a willingness to participate and a consent form is part of ethical protocol by a researcher (Busher & James, 2015). Participants received and signed the informed consent form, which outlined guidance on voluntary participation in the interview process. Prior to participating in face-to-face interviews, participants signed the required informed consent.

In ethical research, attention must be paid to risks, benefits, and autonomy of individual research participants; in addition, to benefits and autonomy as they relate to communities (Corbie-Smith et al., 2018). Participation did not pose risk to participants' safety or the well-being of anyone in the DoD. Participation in this study was voluntary and confidential. Participants were able to withdraw from the study at any phase with written notice or a telephone call to the researcher. Participants did not receive any monetary incentives; however, they did receive an appreciation email thanking them for participation in the study.

During the interview process, the names and of the individual organization and participants remained confidential. I ensured the privacy of participants were protected and personal information remained confidential (Walton, 2016). I did not share the identities of individual participants and details that might identify participants, such as name and the location of the study. I did not use participants' personal information for any purpose outside of this research project. To safeguard the identity and confidentiality of participants, I coded participants with a letter and number as P1–P6, and stored data on a password protected device with data encryption. Data will be kept for a period of at least 5 years to protect participant confidentiality. Final doctoral manuscripts include the Walden IRB approval number, which is 05-30-19-0544220.

Data Collection Instruments

The researcher is the research instrument (Cope, 2014). Therefore, I was the research instrument in this study. Researchers across institutions acknowledge that there is no standard data collection practice shared by researchers (Di Cresce & King, 2017). Data collection can be through interviews, narrative reports, and a review of relevant documents (Conklin et al., 2015). I collected data through documents and interviews.

Researchers use documents to corroborate or augment evidence (Yin, 2014). I collected documents relevant to successful succession planning strategies used by DoD managers for knowledge workers. I also conducted six semistructured interviews of DoD managers of knowledge workers. Interviews allow participants to describe the phenomenon (Payne et al., 2017). The prepared questions were asked according to the interview protocol (Appendix A).

Interview data were collected using a standardized interview process along with voice and manual recording to capture interview content and transcribe interview responses. This study adopted the interview process outlined by Margje van de Wiel, which was adapted from Ben Emans (van de Wiel, 2017). The process begins with the interviewer creating the situation and asking questions that feed into the interviewee’s cognitions to generate the interviewee’s answers (van de Wiel, 2017). The interviewer records and transcribes the interview to produce data from the interviewee's answers (van de Wiel, 2017).

The goal of the interview is to reveal the cognitions of the interviewee on the topic (van de Wiel, 2017). The goal of the interviewer is to ask questions that motivate the interviewee to connect and verbalize cognitions in a reliable manner (van de Wiel, 2017). The interview allows the researcher to connect with participants as subject-matter experts to gather information (van de Wiel, 2017). By using the interview protocol (see Appendix A), I was able to maintain a consistent interview process with each participant. Member checking involves systematic feedback from participants on collected data, interpretations, and conclusions (Lub, 2015). I used member checking to enhance reliability and validity of the data collection process.

Data Collection Technique

Case study researchers use triangulation as part of the data collection strategy (Ridder, 2017). Triangulation is a validity procedure which allows researchers to verify whether conclusions derived through interviews align consistently with data from document analysis (Lub, 2015). Multiple methods of data collection are used to articulate a comprehensive view of phenomenon (Cope, 2014). Methodological triangulation guarantees rich, in-depth data (Fusch & Ness, 2015). Popely (2018) conducted effective methodological triangulation by combining multiple interviews with a review of documents related to the research question. Therefore, I used methodological triangulation to collect data from a variety of data collection methods for this qualitative, single case study.

This research study was based on data collection from documents and interviews. Yin (2014) acknowledged interviews as a key source of data collection in case study research and researchers use documents to corroborate, or augment evidence. For this case study, I conducted six individual, face-to-face semistructured interviews. I used the purposeful sampling technique, which ensured the selection of information-rich respondents that correspond directly to the case study (Kariyana, Sonn, & Marongwe, 2017). The interview protocol (Appendix A) described the interview process that was adopted for this research study.

Participants were emailed an invitation (see Appendix B) and asked to participate in this study. During the interview, participants were asked to provide codified succession plans, employee handbooks, bylaws, and any other succession planning records that will be used as documents. After documenting the interview data, I used member checking to validate the research data. Member checking ensures data trustworthiness (Kariyana et al., 2017). To facilitate member checking, I summarized participants' comments for each research question, and e-mailed it to the participants allowing them approximately one week for review and to provide written feedback.

[Note: The Department of Defense signed a Letter of Cooperation for this study, which is being held in confidence by Walden University's IRB.]

The advantage of using interviews to gather data is researchers can triangulate or verify the information using documents (Lub, 2015). I used documents to triangulate the interview data. Available succession planning documents such as reports, standard operating procedures, and guidance were gathered from interviewees. The advantage of documents is they are sourced resources that corroborate evidence and serve as validation for triangulation (Siegner, Hagerman, & Kozak, 2018). The disadvantage is documents should not drive the study and be the focus; rather, they serve as supplemental resources (Siegner et al., 2018).

During the interview process, researchers can ask for more depth or an alternative view depending on data captured (Randall, Hawkins, Haynie, Nowicki, Armenakis, & Geary, 2015). Disadvantages of interviews are researchers expend effort writing on behalf of the participants and the possibility of participant dropout or limited responses (Hershberger & Kavanaugh, 2017). I used audio recordings to assist with capturing data that was being manually transcribed. Another disadvantage of face-to-face interviews is the chance that the interviewer will lose control of the interview (Byers, 2016). I did not allow interviewees to divert from the questions being asked and redirected the focus to the question being asked.

Data Organization Techniques

Data organization consisted of in-person, one-on-one dialog and interviews, audio and manual recordings, transcribed interview responses, and documents. I performed all interviews using recordings and a notebook that contains raw data captured manually to ensure auditable evidence. Interview data were recorded into Microsoft programs including Word and Excel for data analysis and labeling. Rodarte (2017) proved that the Microsoft suite of tools are effective in evaluating succession planning in government related entities. All raw data will be kept securely for a period of at least 5 years. Physical data will be in a locked, fireproof safe and electronic data will be stored on a password, encrypted device.

Microsoft provides reliable and efficient services for users of professional data (Priya, Vidhyapriya, & Maheswari, 2017). I coded, analyzed, and sorted data into thematic categories that support succession planning for knowledge workers using Microsoft. Microsoft Excel is used to group or categorize data (Panwar, Sharma, Kumar, & Sharma, 2016). The interview data and participants’ identities were coded using a combination of letters and numbers.

Data Analysis

The four types of triangulation are methodological, investigator, theory, and data (Carter, Bryant-Lukosius, DiCenso, Blythe, & Neville, 2014). Methodological triangulation is used in qualitative research and utilizes multiple methods of data collection such as interviews and documents (Carter et al., 2014). Cope (2014) noted the analysis of multiple data sets will articulate a comprehensive view of the phenomenon. I used methodological triangulation to develop a comprehensive understanding of the phenomenon.

Researchers have found that methodological triangulation provides qualitative research with elaborate, in-depth data (Fusch & Ness, 2015). Methodological triangulation in my research study included collecting data from interviews, and review of company documents on succession planning. I analyzed data from the interviews and documents for common themes and patterns related to succession planning in DoD knowledge workers. Yin’s (2011) five-phased cycle for analysis was used for data analysis and included (a) compiling, putting the data in some order; (b) disassembling, breaking the data into smaller fragments; (c) reassembling, using codes or themes to reorganize data; (d) interpreting, using the reassembled data to create new narrative; and (e) concluding, drawing conclusions. A summarization of the data were provided in Microsoft Word.

Translating research questions is a relatively straightforward way to analyze interviews (van de Wiel, 2017). Matching anticipated answers to the intended results provide validity of the research (van de Wiel, 2017). The interview question answers were categorized using content or thematic analysis (van de Wiel, 2017). Data were collected in words and not as numbers (Divan, Ludwig, Matthews, Motley, & Tomljenovic-Berube, 2017). I coded and sorted data into thematic categories that answered the central research question using Microsoft Word and Excel.

Researchers use thematic analysis to find major themes arising from the systematic arrangement of similar and contrasting perspectives (Bano, Jabeen, & Qutoshi, 2018). The explanation of themes explains the phenomenon (Bano, 2018). In Microsoft, I color coded like themes and matched patterns, clusters, and identified relevant themes from the data. Upon determination of themes, I correlated literature and conceptual frameworks to the key themes.

Reliability and Validity

In qualitative research, the credibility of one’s study depends on the depth to which results are believable and trustworthy (Yin, 2014). Reliability and validity ensured my study’s trustworthiness. Byers’ (2016) research affirmed that practices of reliability and validity included dependability, confirmability, transferability, and credibility.

Reliability

The establishment of criteria and methodological standards have increased reliability and objectivity in qualitative research (Lub, 2015). I ensured the conditions for quality interviews were met – gaining access and selecting appropriate participants, building trust, adequate location and length of interview time, quality and clarity of questions, and overall repeatable process (Castillo-Montoya, 2016) – to ensure rich, reliable qualitative data. Yin (2014) noted that a chain of evidence increases reliability during data collection. Therefore, I maintained a chain of evidence.

Rodarte’s (2017) research reasserted that dependability is the consistency of the study’s process. Dependability or coherence is the ability to ensure interpretations align with data collected (Moon et al, 2013). Dependability and consistency in the data collection process of my study provided data that could be inspected and repeated to gain similar results.

Credibility relates directly to a study’s trustworthiness or believability (Moon et al, 2013). Researchers use member checking to ensure the trustworthiness of data collected (Kariyana et al., 2017). I used member checking to ensure the trustworthiness of data in this study. Member checking provides a construct for participants to review their own responses (Harvey, 2015). Member checking requires systematic feedback from participants on the collected data, interpretations, and conclusions drawn (Lub, 2015).

Validity

In qualitative research, validity is viewed in terms of authenticity, adequacy, plausibility, and neutrality (Lub, 2015). Credibility refers to the believability and value of the study (Houghton et al., 2013). Conformability refers to neutrality and accuracy (Houghton et al., 2013). Confirmability, transferability, and credibility are included in practices of reliability and validity (Byers, 2016).

Credibility is enhanced with triangulation (Houghton et al., 2013). Methodological triangulation ensured research credibility in this study. Triangulation reduces problems of construct validity because multiple sources of data provide multiple measures of the same phenomenon (Ridder, 2017). Triangulation also strengthens the validity of case study evaluation thereby providing increased confidence in the findings (Yin, 2013). The multiple data collection methods I used for this study reinforced credibility.

In addition, member checking of data interpretation increased data credibility. By verifying the participants' understanding, I improved the study's validity (O'Sullivan & Rasmussen, 2017). Member checking ensured the value of the data. The use of multiple sources of evidence develops converging lines of inquiry and different reference points strengthens construct validity (Yin, 2014).

Transferability examines whether a study's findings are transferable to other contexts (Rodarte, 2017). If the study's findings can be transferred to a similar situation and preserve the meanings, then the study is transferable (Houghton et al., 2013). Demonstration of transferability was evident through the clear explanation of data collection, data analysis and the findings which allows researchers to see applicability to other situations.

When credibility, transferability, and dependability are achieved, conformability will occur (Rodarte, 2017). I achieved conformability by using interview protocol to collect data, transcribing data, conducting thematic analysis, and documenting the results within this study. Conformability is also achieved through data saturation (Byers, 2016). Researchers achieve data saturation when enough information to replicate the study is received, the ability to gain new information is no longer attained, and no further coding is feasible (Fusch & Ness, 2015). I continued data collection until data saturation was achieved through redundancy in the data.

Transition and Summary

In this study, I used a qualitative, single case study to explore successful succession planning strategies used by six DoD managers for senior knowledge workers that ensured knowledge was transferred. In Section 2, I described my role as the researcher and data collection instrument. I discussed my implementation of the case study design, access to DoD managers for data collection through semistructured interviews, ethical considerations and the use of informed consent forms, and how data coding and analysis was accomplished using Microsoft.

In Section 3, I present the findings of this case study. I include organized data, schematic themes and how the results apply to management practices. I also discuss the implication of my findings as those findings relate to social change and recommendations for future action.

Section 3: Application to Professional Practice and Implications for Change

In Section 3, I present the findings identified through data collected and analyzed from a DoD intelligence agency. In this section, I present the findings and discuss the themes identified in this study. I also discuss potential business practices, implications to social change, and make recommendations for action and further research.

Introduction

The purpose of this qualitative single case study was to explore the succession planning strategies that DoD managers used to ensure knowledge possessed by retirees was transitioned to incumbent knowledge workers. The data came from interviews and a review of documents. The findings of this study include strategies that DoD managers have used to ensure knowledge possessed by retirees was transitioned to incumbent knowledge workers as well as ways to enhance succession planning within the agency.

Presentation of the Findings

The overarching research question was as follows:

RQ: What succession planning strategies do DoD managers use to ensure knowledge possessed by retirees is transitioned to incumbent knowledge workers?

The findings in this research study revealed successful strategies—such as the rehiring of retirees to train the workforce, shadowing, mentoring, and explicit documents—used by DoD managers to transfer knowledge among knowledge workers. The findings also revealed ways to enhance succession planning, which aligned with the conceptual frameworks in this study: the seven-pointed star-model for succession planning and the pillars of KM.

While identifying DoD managers who met the criteria for participation, there were managers who were not implementing succession planning activities. These individuals did not qualify to participate in this study and were not interviewed. I researched successful succession planning strategies within DoD by interviewing six managers who met the participation criteria and were eligible for this study.

All six participants (100%) had knowledge of succession planning and were implementing various succession strategies in their individual office. Although some DoD managers, including the six managers interviewed, are implementing successful strategies, all managers are not, and enterprise-wide implementation does not exist. Interviews took place in meeting areas at the DoD facilities. The interview areas allowed participants to feel comfortable and provide detailed responses to questions without distractions.

Documents from a federal audit validated that DoD had implemented workforce planning activities but lacked full implementation (GAO, 2019a). While executive summaries of the audit's findings are published and released to the public, the detailed supporting documents are not. Overall, DoD has issued the Human Capital Operating Plan that includes succession planning, but each subagency is required to develop strategic workforce plans to further define their workforce planning process (GAO, 2019a). The DoD intelligence agency used in this case study has not completed its plan.

The DoD Human Capital Operating Plan that I reviewed in conjunction with other documents identified succession planning and knowledge transfer as the top priority for the workforce (DoD, 2018). The 70-page plan provides guidance for all DoD subagencies on human capital strategies, initiatives, and measures that should be implemented to meet workforce goals and objectives (DoD, 2018). This plan lays out direction for DoD succession planning, but the guidance has not been fully implemented.

The six DoD managers interviewed are among those who have begun to use succession planning strategies. While some strategies overlapped among managers, some strategies were unique to individual managers. Table 1 outlines successful succession planning strategies used by the interviewed participants in their office.

Table 1

Succession Planning Strategies Used by DoD Managers

Participant	Strategies used
P1	Shared repositories and knowledge directories (i.e., SharePoint); common files; and online questionnaires and videos used to capture knowledge
P2	Certification process that moves junior-level employees up to master-level with shadowing and training with peers; shared repositories and knowledge directories (i.e., SharePoint); and blogs
P3	Knowledge capture checklist, shared repositories, and knowledge directories (i.e., OneNote); SAR/SER programs; shared files and operating procedure documents; and exit interviews
P4	Shared repositories and knowledge directories; standard operating procedure manuals; SAR/SER programs; mentoring program; videos produced by a center focused on capturing DoD history; and exit interviews
P5	Shared repositories (i.e., SharePoint); standard operating procedure manuals; SAR/SER programs; shadowing; and face-to-face conversations/interviews
P6	Shared repositories (i.e., SharePoint); using personal knowledge of tips from DoD's former succession planning staff for current office; videos; and mentoring

The shared repositories and knowledge directories that participants discussed can be accessed by all knowledge workers in the office and contain historical documents on critical data, such as decisions made and plans. The standard operating procedure manuals provide detailed process instructions for knowledge workers to follow. Videos are used to record significant events in DoD's history or to provide visual step-by-step guidance on a task. Videos are usually posted on an internal website for everyone to access. Blogs are also open to everyone and hosted on an internal website.

Based on the findings of this study, DoD leadership must actively engage in succession planning strategies for every subagency and the entire workforce to effectively retain the knowledge of retirees. The themes in this study may offer DoD managers of knowledge workers additional approaches for implementing effective succession planning and ways to enhance existing efforts. In this research, I discovered four themes: (a) prioritize and shift the culture toward succession planning, (b) implement succession planning for the entire workforce, (c) develop individual and organizational succession plans, and (d) establish a succession planning policy and enterprise-wide program.

Theme 1: Prioritize and Shift the Culture Toward Succession Planning

Theme 1 in the findings of this study is that DoD leadership prioritizes succession planning and the agency to shift the culture to support the effort. Rothwell (2005) identified leadership commitment as the first step in the seven-pointed star model for succession planning. With an overall population of about 3 million active, reserve, and civilian personnel (Allen, 2015), DoD will potentially have significant knowledge loss without a culture that values and implements succession planning. Table 2 outlines the resources and references that support this theme.

Table 2

Theme 1 and Frequency Counts

Theme	Participants and documents (resources)	References
Theme 1: Prioritize and shift the culture toward succession planning	22	32

Note. Documents included the DoD Human Capital Operating Plan, policy, standard operating procedure manuals, strategic plans, briefs and testimonies, checklists, internal web content (articles, videos, etc.)

While succession efforts are underway, all six participants (100%) emphasized the importance of succession planning being acknowledged by leadership and properly marketed with the workforce if efforts were going to continue to be successful and grow. All six participants (100%) noted that DoD’s culture is mission focused due to the significance of its work, and people initiatives such as succession planning can suffer. The DoD Human Capital Operating Plan directs leadership to implement a performance culture that will develop the workforce and maintain effective strategies that support the mission (DoD, 2018).

P5 stated that succession planning is not considered a priority by leadership and that must change if it is going to be fully implemented. The Army started a campaign that focuses on the workforce’s competence, character, and commitment because the influence of its culture must drive the workforce (Allen, 2015). The DoD Human Capital Operating Plan directly ties culture to employee engagement and performance (DoD, 2018). If succession planning is going to be fully implemented, then the DoD culture will drive employees to engage in the effort.

P2 commented, “Unfortunately, with the barriers of time and priority, it is hard to prioritize succession planning and focus on the mission . . . mission always comes first, and people second.” Four out of six participants (67%) used the word *priority* when discussing perceived succession planning value. Other participants used synonymous words such as *value*. P6 asserted that succession planning is not a “sexy” business process, but DoD must dedicate resources to get the job done. P3 stated that everyone talks about succession planning and KM, but there is no deliberate and thoughtful action toward it.

Researchers have found that defense ministries and organizations fail to change when leadership does not use the culture of the institutions (Grant & Milenski, 2018). DoD succession planning efforts will not be fully implemented unless the culture prioritizes it along with the mission. P4 added that a barrier to successful implementation is the pace and increasing complexity of DoD’s mission; overseers fail to be convinced of the resources needed to meet mission needs, so people suffer. DoD is working to meet the tasks of today and not working toward the future of the workforce.

Four out of six participants (67%) specifically used the word *culture* when discussing the DoD atmosphere toward succession planning. Other participants used synonymous words such as *environment*. An organization’s culture has the ability to direct employee behavior through influence (Yu, Fang, & Wang, 2016). P1 confirmed that the DoD needs an effective, broad communication strategy on why succession planning is important, and there needs to be a culture shift if succession planning is going to be implemented. Communication cannot be stove-piped or depend on a small contingent of managers if succession planning is going to be valued throughout the agency.

Organizational culture is the set of assumptions, norms, and values adopted by the workforce and considered valid (Beckett & Myers, 2018). All six participants (100%) highlighted that the normal DoD culture values mission before people and that efforts like succession planning suffer as a result. P2 stated, “People should be the first priority, but the mission needs to be done.” P3 remarked that “succession planning is not a priority of the day,” and P4 commented, “DoD is focused on getting the mission done.”

P5 also stated, “Succession planning is not considered a priority by upper-level leadership.” For succession planning to be valued as a norm, the business culture has to change. Stankosky (2005) highlighted business culture as an essential component of the leadership pillar of KM, and communication is an essential component throughout all four pillars. Participants’ feedback acknowledged that a cultural change is required for the workforce to view knowledge sharing as acceptable and to know that their job is not in jeopardy if they share tacit knowledge.

Scholars have found a direct relationship between culture and human behavior (Ludolf, Silva, Gomes, & Oliveira, 2017). If DoD employees perceive the organizational culture as not supportive of succession planning and leadership does not value the effort, then it will not be done. Organizational culture supports performance improvements and develops long-term business sustainability (Ludolf et al., 2017).

Theme 2: Implement of Succession Planning for the Entire Workforce

Theme 2 in the findings of this study is the recognition that DoD has succession planning strategies in place for key leadership positions and work roles, but all six participants (100%) identified that succession planning needs to be conducted for the entire workforce. Four out of six participants (67%) specifically used the words *everyone* or *all* when referring to who should use succession planning strategies. The remaining two participants (33%) identified the younger and older knowledge workers or workforce. Participants provided standard operating procedures and manuals that gave guidance on how to identify and prepare leadership successors through a series of classroom courses and online training on communication, leadership, and human resource skills, but there was no focus on the workforce as a whole. The DoD Human Capital Operating Plan also directs leadership to implement enterprise-wide workforce initiatives and programs that align to strategic organizational goals such as succession planning (DoD, 2018). Table 3 outlines the resources and references that support this theme.

Table 3

Theme 2 and Frequency Counts

Theme	Participants and documents (resources)	References
Theme 2: Implement succession planning for the entire workforce	19	35

Note. Documents included the DoD Human Capital Operating Plan, policy, standard operating procedure manuals, strategic plans, briefs and testimonies, checklists, internal web content (articles, videos, etc.)

Although P4 stated that "knowledge workers have discrete knowledge and that information is not transferred without succession planning." Unlike the formal succession planning structure for key positions, DoD managers did not have documents or guidance for transferring knowledge from senior knowledge workers to junior workers. P1 suggested that DoD needs to recruit and train the younger generation to ensure someone is in place to take over the mission when the older generation retires. Unfortunately, P1 also stated, "There has not really been anything successfully implemented enterprise-wide."

P2 highlighted that DoD has acknowledged the need to address succession for the workforce and take better care of its people. P2 stated that there is a new strategic objective to "develop, retain, and value a tailored, agile workforce, continually investing in skill acquisition and career growth opportunities." While the objective is a good start, P2 stated, "The current career development team is not grooming the entire workforce."

P2 also expressed the need for senior-level knowledge workers to have an additional duty to share and impart knowledge to the workforce. P3 commented that, without succession planning, the retirement of senior knowledge workers creates gaps in technical areas because no one has been trained to step in. P4 suggested that junior employees should be guided and trained by senior employees, especially since P3 noted "talent can be scarce, and resources can be limited." P5 highlighted that, due to the nature of the DoD mission, knowledge workers should begin to transfer knowledge early in their careers and encourage overlap with other personnel.

Succession planning must start long before an employee's retirement date and include processes to capture long-time institutional knowledge (Mitchell, 2019). P6 stressed that DoD can always back-fill for a retiree's position and bring someone else up to speed, but it takes time to train, which delays the accomplishment of mission goals. Without a strategy for succession planning and the retention of knowledge, there will be a serious consequence in terms of the loss of institutional knowledge (Sellers et al., 2019). When the entire DoD workforce practices succession planning, institutional knowledge will transfer and be retained among employees which would eliminate or significantly reduce employee learning curves and delay in mission accomplishments.

As more of the workforce retires, organizations have seen increased vacancies and fewer experienced workers to fill the positions (McDermott & Marshall, 2016). Succession planning limits the impact when skilled and experienced employees leave the workforce and ensures continuity and stability (McDermott & Marshall, 2016). P2 stated that DoD needs to have open discussions to ensure effective ways forward and share succession planning processes and tools widely throughout the enterprise. Organizations have broadened their scope of succession planning from only leadership positions to specific key roles and further to include the entire workforce (McDermott & Marshall, 2016). The DoD needs to follow these examples to ensure the retention of institutional knowledge and to maintain a competitive advantage.

Theme 3: Develop Individual and Organizational Succession Plans

Rothwell (2005) emphasized that the goals of succession planning are to match the organization's present talent to the future talent and help organizations meet operational needs. Theme 3 in the findings of this study is that succession planning is needed at an organizational level to identify successors in the DoD leadership chain as well as the need for the Agency to include strategies for each individual based on personal career goals. All six participants (100%) noted that importance of individual plans. Table 4 outlines the resources and references that support this theme.

Table 4

Theme 3 and Frequency Counts

Theme	Participants and documents (resources)	References
Theme 3: Develop individual and organizational succession plans	29	53

Note. Documents included the DoD Human Capital Operating Plan, policy, standard operating procedure manuals, strategic plans, briefs and testimonies, checklists, internal web content (articles, videos, etc.)

Furthermore, the DoD Human Capital Operating Plan states that leadership should align individual performance with strategic organizational objectives (DoD, 2018). Strategic succession planning involves developing and implementing a long-term plan with internal organizational strengths while reducing the current effects of internal weaknesses and future external threats (Rothwell, 2005). The defense personnel management appraisal program was created to link individual performance to DoD values and mission (DoD, 2018), but all six participants (100%) did not feel DoD was adequately aligning individual plans with organizational succession goals. Five out of six participants (83%) specifically stated that succession planning should be a documented objective on individual performance plans.

In order to plan for DoD needs, individual plans should feed into the development of organizational plans. P1 stated, “It is critical to know what people’s plans are…and there is a critical need to understand an individual’s plan.” P5 stated that individual performance goals and objectives should be funneled up the leadership chain, so everyone is aware of the workforce’s goals. P4 added that employees’ “skills should be tracked at a corporate level.” P4 also noted that succession planning and documentation “will help the DoD workforce become better strategic planners.”

Documents from a federal testimony noted that a key strategy for workforce planning would manage employee performance and create a “line of sight” between individual performance and organizational results (GAO, 2019b). P6 noted that DoD had a program that allowed employees to identify career goals and positions that interest them in individual development plans for review by the DoD Career Board, but the program no longer exists. P4 stated that DoD has used “a mentoring program for succession planning but its value needs to be connected to an employee’s performance plan and reviews should be multi-directional.” P3 indicated that “leadership should ask employees what their goals are and where they want to be.”

In order to implement succession planning successfully, P2 believed, there must be linkage of individual development plans with one’s performance plan to ensure accountability. Rothwell (2016) also identifies necessary steps for organizations to assess present work and people requirements, appraise individual performance, assess future work and people requirements, and assess future individual potential in the seven-pointed star model for succession planning. Strategic planning is also an essential component of the leadership pillar of KM (Stankosky, 2005).

Formalized succession planning leads to better decisions and better outcomes because trained professionals will lead the efforts (Schepker, Nyberg, Ulrich, & Wright, 2018). Individual and organizational succession planning outlines current and future workforce decisions based on mission needs and vision. Succession processes allow systematic data collection that leads to decision-making and provides alternatives if a plan does not develop as expected (Schepker et al., 2018).

Theme 4: Establish a Succession Planning Policy and Enterprise-Wide Program

Theme 4 in the findings of this study is the need to formally develop a succession planning policy and guidance for DoD as well as a program that engages the entire workforce to meet federal mandates. All six participants (100%) commented that an overarching, enterprise-wide effort was needed. As detailed in the above Literature Review, the federal policy for succession planning is codified in 5 C.F.R. §412.202, *Systematic training and development of supervisors, managers, and executives*, which mandates that agencies must have written policy and training to ensure implementation. In addition, federal policy 5 CFR part 250, subpart B, *Strategic Human Capital Management*, provides guidance concerning workforce and succession planning along with a Human Capital Framework for talent management systems (5 C.F.R. §250, 2016). Table 5 outlines the resources and references that support this theme.

Table 5

Theme 4 and Frequency Counts

Theme	Participants and documents (resources)	References
Theme 4: Establish a succession planning policy and enterprise-wide program	21	43

Note. Documents included the DoD Human Capital Operating Plan, policy, standard operating procedure manuals, strategic plans, briefs and testimonies, checklists, internal web content (articles, videos, etc.)

All six participants (100%) specifically used the word “enterprise” while discussing who should use succession planning strategies. The DoD intelligence agency in this case study does not possess a formal policy or enterprise-wide guidance document for succession planning. P2 highlighted that formal guidance in the form of policy, bylaws, or employee handbooks does not exist. The DoD Succession Management Office confirmed this statement.

The DoD Human Capital Operating Plan directs sub-agencies to develop, publish, and implement policy, resources, and tools to maximize employee performance and retention (DoD, 2018). P4 stated documents include standard operating procedures but feel they do not outline how to do succession planning for the entire workforce; rather, standard operating procedures are a succession planning tool used by some members of the workforce to outline how to complete assignments. Based on OPM guidance at the highest federal level, DoD knows that succession planning is mandated. However, without formal policy guidance specific to DoD, succession planning will not be implemented and enforced throughout the entire agency. P3 noted that documents are not specific to succession planning and a complete succession strategy for the workforce does not exist.

Although it is not fully developed for the entire workforce, DoD has begun to implement succession planning processes for leadership successors. In addition, DoD has the Selective Employment of Retirees (SER) and the Standby Active Reserves (SAR) programs which were established to rehire retired employees for temporary service to transfer knowledge and train the workforce. P4 stated that the SER/SAR programs had a good sentiment behind them and was a step toward succession planning but that the programs are not effective because the programs have led to senior knowledge workers writing documents or operating procedures, and they are not accustomed to working in this capacity; therefore, the requirement to document knowledge is not met. P5 commented that formal documentation does not exist but informal succession planning documents specific to an individual team have been generated.

P5 also shared an experience of working with two SER/SAR personnel. Unfortunately, the individuals augmented the workforce. SERs/SARs were not transferring knowledge as intended by the programs. P5 stated, “If succession planning was properly implemented in advance of someone retiring, then DoD would not have the added expense of hiring back retirees and the retiree could retire in peace.” Succession plans that allow for gradual transition of retirees and creation of opportunities for the younger workforce affords continued contribution from the retiree (Conn & Wright, 2018). Researchers found that practices such as leveraging department resources, establishing transition positions for retirees, and exploring innovative job sharing and mentoring models allow better succession planning (Conn & Wright, 2018). Hence, DoD should plan for employees' departure in advance and capture knowledge before retirement without additional costs to the agency.

If an enterprise-wide succession planning program was developed for all levels of the workforce, then funding and resources used for the SER/SAR programs could be reallocated to other initiatives because knowledge would be efficiently transferred and retained before employees retire. P3 stressed, "DoD could eliminate SERs/SARs if employees transferred knowledge in advance but there is no incentive to do so." P4 stated that the SER/SAR programs could be eliminated but DoD is too focused on getting mission done and the demand for knowledge workers is too high. However, if DoD added succession planning to employees' individual development plans, it would ensure accountability and provide an enforcement mechanism. All participants stated that DoD should also add incentives and rewards specific to succession planning to assist with implementation.

An effective succession planning program must require side saddling with retirees to learn the program history and the tacit knowledge of workers. P5 believes knowledge workers are willing to discuss certain data that they would not explicitly document. There has to be an opportunity to discuss and ask questions about processes and projects. These discussions will lead to what P3 described as knowledge on "history, nuanced relationships, and political realities—details that don't lend themselves to written words."

P6 witnessed how mentoring and senior assignments to train junior employees were effective ways to transfer tacit knowledge; thus, these strategies must continue. An efficient program also needs to document knowledge. P1 stated, “SharePoint, common files, and shared knowledge directories are huge in order to retain knowledge. It is a place where organizations can place all documents for everyone to access.” P6 suggested using knowledge videos as an innovative retention format as well as a formal knowledge capture program. P6 noted that “using digital components more like videoing experts using tools makes [knowledge] more accessible to everyone and not to onus on any one person.” P3 also highlighted that blogs have been effective in capturing knowledge, but someone must extract the useful information and log it into a useable format.

An enterprise-wide succession planning program will create a talent pool and management approaches that ensure professional development (Cavanaugh, 2017). DoD must implement an effective and efficient succession program that transfers knowledge and trains the entire workforce. A succession planning policy and a formalized, enterprise-wide program is required to ensure accountability and implementation. The program must include standard operating procedures and documents that outline minimum program requirements needed to meet succession planning mandates.

Applications to Professional Practice

By studying strategies that DoD managers use to retain and transfer knowledge from retirees to incumbent knowledge workers, I was able to highlight existing strategies and how DoD leadership might address succession planning gaps. The four themes offered a roadmap that leaders can follow to enhance knowledge capture and retention: (a) prioritize and shift the culture toward succession planning, (b) implement succession planning for the entire workforce, (c) develop individual and organizational succession plans, and (d) establish a succession planning policy and enterprise-wide program.

A key to success is to use succession planning strategies for the entire workforce and not only key leadership positions. By placing value on succession planning and establishing DoD policy guidance, leadership will be able to meet federal OPM requirements and ensure knowledge is retained for individual and organizational goals. The establishment of an enterprise-wide program will ensure minimum succession planning standards are implemented throughout the entire Agency with the proper oversight and leadership support.

DoD managers have inadequate succession planning strategies to ensure knowledge possessed by retirees is transitioned to incumbent knowledge workers at every level of the workforce. However, the increase in employee retirement has created a shortage of DoD knowledge workers that are trained and capable of combating threats (GAO-17-533T, 2017). DoD needs to use this study's research to increase understanding of how knowledge assets increase productivity and profitability through the retention and sustainment of knowledge. Succession planning is a necessity to maintain or improve operations to meet mission requirements.

Implications for Social Change

The implications for positive social change include the potential for increased agency continuity by improving employee retention which may enhance organizational and community relationships through the prosperity of knowledgeable workers. The findings of this study could also contribute to social change by highlighting the specific steps DoD leaders could take to become better stewards of government resources and align practices with federal mandates. By eliminating retiree programs such as SER/SAR and implementing succession planning early in employees' careers, DoD could reallocate resources to other internal or external programs and allow retirees to remain fully engaged in operations until retirement. The study may also contribute by improving knowledge workers' ability to contribute to the local community through gainful employment.

By creating a culture that values succession planning, the federal government is likely to be more effective because the workforce has been trained which could affect job satisfaction and employee retention. If adequate knowledge transfer occurs, there is less training required because the skill gap is reduced and personal stress from the inability to perform is minimized because knowledge is available. By demonstrating good business practices of this type and integrating corporate social responsibility, DoD will serve as a good example for other Departments and Agencies in the federal government and can share lessons learned. DoD and the federal government will maintain continuity of operations during personnel turnover and remain responsive to stakeholders and potential communities' needs.

Recommendations for Action

The participants interviewed provided insight into succession planning strategies that DoD managers use to ensure knowledge possessed by retirees is transitioned to incumbent knowledge workers as well as ways to enhance existing efforts. Below is a list of recommendations from my interviews with participants. DoD leaders may benefit from considering and implementing the recommendations. An effective way to do so may through a working group that will consider succession planning efforts and develop a tangible program that includes training to assist the workforce in transitioning from current business practices.

My recommendations are as follows:

1. DoD leadership should make succession planning a priority and conduct a communication and marketing campaign that will shift the Agency's culture to support the effort.
2. The DoD should plan for employees' departure in advance and capture knowledge without additional costs to the Agency. The existing SER/SAR programs should reduce overtime as succession planning strategies are implemented and the funding reallocated to workforce development efforts.
3. The DoD must formally develop a succession planning policy and guidance for the Agency in order to enforce the federally mandated requirement. Each employee should have a performance objective that requires engagement in succession planning efforts.
4. The DoD should develop an enterprise-wide succession planning program that engages the entire workforce at all levels.

After publishing this study, I plan to work with DoD leadership to further research and continue enhancement of succession planning processes that can be implemented within the Agency studied. I also plan to publish additional articles on this subject in government journals and present at federal government conferences. My goal is to participate in efforts to enhance effective and efficient succession planning strategies for the federal government workforce.

Recommendations for Further Research

This qualitative case study explored succession planning strategies used by one intelligence agency within DoD for retiring knowledge workers. Future research on DoD succession planning in other agencies may yield different results. This research study was limited to a single case study, but future research studies could address the limitations using the same research method and design in different locations. For instance, studying one DoD agency does not mean that the study is not transferable to other agencies.

There was also the limitation of the ability to access and identify DoD managers of knowledge workers. I identified DoD managers through proper authorization and assistance from the DoD Research Office. This selection method may have biased the sample towards the organization's managers with the best succession planning strategies. All participants were managers within different departments of the same DoD agency and able to provide reinforcing perspectives rather than contradictory data.

Furthermore, the participants were volunteers who could have been eager to talk about their expertise with succession planning. In this study, I encouraged truthfulness and openness by ensuring confidentiality and conducting private interviews. However, participants might have replied to questions with what they perceived DoD leadership perspectives were.

Reflections

The Doctor of Business Administration program at Walden University has been challenging and rewarding. The professors teach students to operate at a scholarly level and forces a higher level of commitment and discipline in studies. Perseverance and determination were values needed to succeed. The encouragement and network developed through the cohorts and the relationship with the Chair were also vital for success.

I chose the topic of succession planning for retiring DoD knowledge workers because it is a topic that is often discussed without full implementation for every level of the workforce. The research process enlightened me to understand why successful strategies and processes for DoD succession planning are not implemented enterprise-wide. The literature review and interviews highlighted the underlying business concepts and problems surrounding DoD succession planning. The research reinforced my thinking that succession planning for the entire workforce is essential if organizations are going to continue efficient operations without knowledge gap impacts in the workforce as senior employees retires.

After completing this study, I am knowledgeable of substantial data that can be used to influence the DoD succession planning process. I will use my knowledge to enrich the DoD workforce and gain leadership support for proper succession planning implementation. These findings could also be a basis for additional research and the study could provide a basis for a book that addresses succession planning in the federal government.

Conclusion

This qualitative single case study explored succession planning strategies that DoD managers use to ensure knowledge possessed by retiring knowledge workers is transitioned to the workforce. The findings of this study revealed four themes: (a) prioritize and shift the culture toward succession planning, (b) implement succession planning for the entire workforce, (c) develop individual and organizational succession plans, and (d) establish a succession planning policy and enterprise-wide program. DoD has begun succession planning efforts that incorporates aspects of KM. However, leadership needs to formalize efforts through Agency policy and establish a succession program that incorporates the entire workforce.

DoD's succession plan must also include a communication and marketing strategy which will shift the culture and perceived norms. An organization's ability to bond diverse employees in a unified culture under a single vision is a mission-critical necessity that is vital to success in business processes including succession planning (Makino & Oliver, 2019). The culture shift should make the workforce a top Agency priority and focus on individual and organizational goals and vision.

The dangers of not having succession planning strategies in the government or public sector has been a growing challenge due to the high loss of knowledge workers (Pila, Schultz, & Dachapalli, 2016). DoD cannot expect to maintain continuity of operations or advance competitively if institutional knowledge is not retained and personnel is not adequately trained to assume retirees' roles. Studies estimate a shortage of public workers due to the impending retirements and challenges of an aging workforce; thus, the challenge to develop the workforce is complex and reinforces the need for succession planning (Sellers et al., 2019). If the DoD is going to remain relevant and continue to defend the United States, it will need a talented workforce that is trained and ready to operate the mission at any given time.

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Appendix A: Interview Protocol

Introduction of the interview

Introduce yourself as interviewer; explain the purpose of research; show appreciation for participation; give the information letter and ask for participants to sign the informed consent; give a brief outline of the interview topics and indicate the time involved; clarify the roles and expectations of both interviewer and interviewee; ask permission to record and manually document the interview; remind participants that participation is voluntary; ask if there are any remaining questions

Body of the interview

The below interview questions will be asked of all participants.

1. In your experience, what is the impact when succession planning is not properly implemented as a knowledge worker departs service?
2. What are the critical steps in the process of succession planning for senior knowledge workers within the DoD STEM and cyber departments?
3. What are the effective knowledge management techniques used by DoD managers for assuring the retention of retiring knowledge workers in STEM and cyber fields?
4. How are DoD managers effectively retaining and transferring the tacit knowledge of retirees?
5. What were the key barriers to implementing the successful strategies for retiring senior knowledge workers?
6. What types of processes and tools have DoD managers in STEM and cyber departments used to address key barriers in the implementation of successful strategies for succession planning and tacit knowledge management for knowledge workers?
7. What, if any, incentives are used by DoD managers in STEM and cyber departments to enhance the implementation of succession planning and tacit knowledge management for knowledge workers?
8. What additional information can you share with me to understand the successful strategies that DoD uses for succession planning of STEM knowledge workers?

Conclusion of the interview

Indicate the end of the interview; summarize the main points; thank the interviewee for the valuable contribution; reiterate how the data will be used; schedule a second interview for member checking, which allows participants to validate responses to the initial interview; ask if there are any questions or comments

Appendix B: Email Invitation

Dear <DoD Manager>,

I request for your consideration and participation in my research study. I have been pursuing a Doctor of Business Administration degree from Walden University over the past couple of years. My proposal to conduct the study is approved and I hope to finish by the end of 2019.

My research study includes succession planning strategies for Department of Defense (DoD) knowledge workers. I am interviewing managers to ensure knowledge possessed by retirees is transitioned to incumbent knowledge workers. At this point, I am reaching out to you because you meet the research criteria. The time commitment would involve a short interview (1 hour or less) with you and the opportunity to review any relevant company documents such as documents including codified succession plans, employee handbooks, bylaws, and records of leadership development activities. I would be obligated to keep all of this information confidential and will supply consent forms and other information to that effect. An agreement would not be binding, so withdrawal can be done at any point.

If you agree to participate, I would like to schedule an appointment with you on <date range>. I can be available at your convenience to meet at <location>. Thanks for your consideration.