



ACQUISITION RESEARCH PROGRAM SPONSORED REPORT SERIES

Effects of Teleworking on an Organization's Overall Productivity and Morale

June 2023

LCDR Eric J. Richey, USN

LCDR Shaun P. Mcgahan, USNR

Thesis Advisors: Dr. Deborah E. Gibbons, Associate Professor
Dr. Latika Hartmann, Associate Professor

Department of Defense Management

Naval Postgraduate School

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Prepared for the Naval Postgraduate School, Monterey, CA 93943.

Disclaimer: The views expressed are those of the author(s) and do not reflect the official policy or position of the Naval Postgraduate School, US Navy, Department of Defense, or the US government.



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ABSTRACT

While the concept of teleworking has been around for decades, the Department of Defense has recently taken major steps to expand its telework capabilities. The primary reasoning for this increase in capabilities over the past five years has been mitigating potential mission impact in response to the spread of COVID-19 and the related social distancing requirements. Since then, there has been a major shift incorporating telework into day-to-day activities within both public and private workforces. This research explores how telework affects individual and group productivity. Analysis of previous studies and literature review assisted in the development of a survey that received responses from multiple agencies that provide varying types of logistic support to the DOD. Survey respondents, on average, favored telework and wanted to increase the number of days per week that they work remotely. Further, they indicated that the development and implementation of a telework policy can positively impact the overall morale and productivity of an organization. Organizations that employ telework policies should capitalize on the benefits of telework to increase job satisfaction. Our research shows that telework provides the flexibility that individuals desire, and with the correct management and support it can increase morale and productivity.



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I. INTRODUCTION

A. BACKGROUND

While the concept of teleworking has been around for decades, DOD Agencies that provide logistics support have recently taken major steps to expand telework capabilities. The initial reason for this increase in capabilities was to mitigate potential mission impact due to the spread of COVID and the following lockdown and social distancing requirements. Since then, there has been a resounding movement within the public and private workforce to find ways to implement telework policies and capitalize on the technological advances in day-to-day tasking. With information and communication technology continuing to advance, as well as the growing desire amongst qualified individuals to telework, this study offers insight into how an organization's telework policy can affect the actual and perceived morale and productivity of its employees.

The rapid expansion of the ability and desire to telework stems from the transforming nature that information and communication technology present in computer-based workplaces. Understanding this change in technology and workforce preference is vital for organizations to ensure they are providing their workforce with available technologies to maximize their efficiencies. Utilizing these new technologies not only has an impact on how individuals complete their jobs but will affect talent management as well. The ability to telework and the associated flexibility is becoming an ever more prominent factor for employees when they are choosing career options. Organizations must take this into consideration to recruit and retain talent (Castillo, 2021).

As with any emerging capability, organizations must analyze the potential functionality and impacts to their missions and decide on whether it should be implemented. As information and communication technology develops, there is less of a requirement for individuals to be in a fixed location to complete computer or communication-based work. Access to these technologies is a key facilitating factor in



the growth of the desire and capability to work away from a central location (Diamond & Lafferty, 2013). In the past, most workstations consisted of fixed desktop computers that were just as much a part of an office as the filing cabinets, furniture, and desks themselves. Current technology allows organizations to provide their workforce with laptops and docking stations, which make moving from workstation to workstation as simple as unplugging and reconnecting.

B. RESEARCH APPROACH AND FINDINGS

The concept of teleworking or working from home has been studied with a renewed focus in recent years. DOD became particularly interested in the topic in December 2010 with the implementation of the Telework Enhancement Act which granted eligible Federal employees additional flexibility and options to telework. This bill reflected the Government's acknowledgement that telework can be used as a tool with positive impacts on productivity and morale (Jones 2013). While most studies regarding telework conclude that it provides net benefit to the organizations that allow it, there are tradeoffs that require specific attention to ensure employees can capitalize on these benefits (Hartig, 2007). Studies have been conducted across multiple professions describing the ways telework can potentially impact organizations' abilities to attract new talent, retain current talent, and provide an overall better work experience that results in higher job satisfaction (Perie & Baker, 1997).

Our research was designed to measure employee perceptions of their individual and team productivity, and how their organizations could provide them with better support. By drawing on literature, we first study how morale affects individuals and organizations. Then we review studies on ways that telework can potentially impact morale. We then analyze surveys from various agencies including two DLA Major Subordinate Commands, NAVSUP FLC Pearl Harbor, and NAVAIR. This sampling provided valuable insight into respondents' perceptions about their organizations' telework policies and effects of telework on their individual and team productivity.

In our literature review we found that many key components for telework are applicable to computer or communication-based organizations regardless of the industry.



We found that individuals prefer the flexibility that telework allows and feel strongly that their productivity is either unchanged or higher while teleworking compared to being in a centralized location. We also found several areas of concern that organizations must be cognizant of to ensure that their workforce does not become disconnected or that their accomplishments are discredited because they telework. There is an undisputable desire to telework amongst the agencies we surveyed, and the productivity of these agencies was rated highly by the respondents. There is also evidence that an employee's desire to telework does not reflect a desire to be isolated, and the need for communication increases while teleworking to ensure individuals are not disconnected and teams remain in sync regarding their tasking.

Our survey also found that many participants are confident in themselves and their team's ability to maintain the necessary levels of productivity while teleworking. Many comments described employees who feel they are more productive when teleworking and have no issues communicating with their teams. Participants also responded that telework is important to them when choosing career opportunities. While the survey revealed that participants overall had positive feelings towards their organization's development and implementation of telework policies, there were also areas that need attention. The most persistently recurring theme was the need for increased equipment ranging from additional monitors, workstations, and cell phones.

The next sections of this report are organized as follows. Chapter II provides an overall definition of telework and morale. Chapter III discusses how telework can affect morale. Chapter IV discusses perceived and actual effects of telework on productivity. Chapter V discusses the methods used to conduct and analyze our survey. Chapter VI showcases the results from our survey. Chapter VII concludes the report and provides our recommendations for DOD Logistics organizations that allow telework.



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II. DEFINING TELEWORK AND MORALE

Before we delve deeper into the potential ways that telework can affect the morale of individuals, it is necessary to understand how we define telework and morale, and how past studies have studied their impact. Telework as we discuss throughout this thesis is known by several other terms including telecommuting, working from home, remote working, satellite working, offsite working and other terms describing what essentially boils down to using computers and telecommunication capabilities to conduct work away from a central location. Other important factors for consideration include the employment status of individuals and the organization they work for (i.e., permanent employees, interns, contractors), the percentage of time individuals spend teleworking vice in the office, and the geographic location where the telework will be conducted (Diamond & Lafferty, 2013).

A. DEFINING TELEWORK

While the ability to work from home or at satellite locations has gained attention as a possible substitute for having all employees report to a designated location for years, recently it has become the topic of considerable debate at all levels of organizations. Some managers, especially those unfamiliar with the concept of telework, hold onto preconceived notions that the remote worker is not as productive as those who report to work sites (Kaplan et al., 2018). These mindsets have the potential to lead to the achievements of those who telework to be viewed as less substantial than the achievements in the office (Jones, 2012). For example, Jones (2012) conducted a web-based survey of one hundred thirty-six managers and employees and found there was significant resistance to allowing individuals to telework based around managers' ability to trust their employees when not in the office. There are also the normal life distractions that occur while individuals work from home. Whether it be family that are in proximity or house chores there are several non-work-related disruptors that could potentially pull employees away from their tasking. Butler (2011) conducted a survey asking teleworkers to confess their biggest distractions when working from home and found that household



chores led the way at 31%, TV followed at 26%, pets at 23%, errands at 19%, internet at 18% and children at 15%. These distractions, have the potential to take employees away from their assigned work and decrease productivity.

On the positive side, other studies find telework provides employees with the freedom and flexibility to complete work in a more relaxed environment. Employees that avoid the burden of commuting often spend additional time at their workstations, vice trying to leave the office early to beat traffic (Adams-Auten, 2005). Telework also provides individuals an option to stay away from co-workers when they are feeling slightly under the weather, but well enough to work. This has the potential to mitigate workplace illness as well as reduce the amount of sick leave that individuals would be required to take (Financieras, 2020).

While the primary study of telework throughout this thesis will focus on day-to-day operations, organizations should not neglect the capabilities that remote work can play in abnormal situations. Whether that is a pandemic, natural disaster, or bringing familiar equipment to another worksite, there is an undeniable capability in the technology that has been developed, and it is imperative that organizations find relevant ways to utilize it to their advantage (Hill et al., 2008).

B. DEFINING MORALE

Supervisors are tasked with the day-to-day operations of organizations, as such it is critical that they not lose sight of their team's morale and how it affects the overall health of their organization (Lyden & Klingele, 2000). There are nuances that employees display that can be utilized to gauge how high, or low, their morale is, and it is necessary for leaders to be able to spot these nuances and either address or encourage the behavior or factors that cause them.

Shillington (2011 p. 1) describes morale as “a mental state composed of...confidence and pride in self, leaders, and the team.” Peterson et. al. (2008) consider morale to be an indicator of group well-being. The word morale has been around for centuries and has evolved over time. Today's usage of morale reflects emotional and



motivational aspects of individuals and groups and has strong effects on the confidence, enthusiasm, optimism, and loyalty of those concerned (Manning, 1991). While at senior levels morale of the overall organization should be the focus, it is difficult to establish and maintain a group's feeling of commitment and pride if there are multiple members that are alienated or disgruntled (Peterson et. al. 2008).

Bowles and Cooper (2009, p. 2) break morale down into two parts. First is the “state of individual psychological well-being upon a sense of confidence and usefulness and purpose.” This individual focused point goes deeper than the occasionally misconstrued meaning of morale of whether an employee shows up with a smile. General happiness plays a part, but in terms of morale that an organization is concerned with, it is more focused on whether the individuals within the organization have pride in their work and feel as though they are being properly utilized. The second part focuses on overall organizational morale in that “the spirit of a group makes the members want the group to succeed” (Bowles and Cooper, 2009, p. 2). High-morale organizations are comprised of individuals that are willing to work together to find solutions, even if that means occasionally completing tasking that might be outside of their listed responsibilities. Members of teams with high morale will be more engaged, and often put the success of the team over their individual well-being (Cowart, 2014). Low morale in an organization will leave leaders dealing with issues in retention or an underperforming workforce, instead of making mission critical decisions (Shillington, 2011).

Since it is such a challenge to find measurable information about the morale of an organization, any indicators that provide insight into the morale of an organization should be valued (Parker, 1995). Since World War II there have been studies that utilize performance indicators such as absences and tardiness to measure morale. In various studies by the Army during WWII, the number of check-ins to sick call or requests for temporary absence was a relatively successful method of determining how individuals felt about the overall wellbeing of their units (Bernberg, 1952). Other indicators of morale include employee disengagement, constant or rampant anxiety about private workplace matters, boredom, or inactivity.



More recently Osman et al. (2018) created an instrument with excellent reliability in measuring morale in the Malaysian Army. The study was broken down into six sections that measured morale at the individual level. Each section had no more than 10 questions. These sections were then discussed in two focus groups comprised of senior Malaysian Military officials that provided input regarding the clarity, simplicity, relevance, and validity of the sections. This survey covered the individuals' understanding of objectives, mental readiness, selflessness, team spirit, and solidarity to measure individual morale. This study proved that with a high measure of validity and reliability, a process can be developed within organizations to measure the morale of individuals.

For decades military leaders have understood the importance of morale. Napoleon quoted that "morale is to the material as three is to one." The infamous Field-Marshal Montgomery remarked, "The more I see of fighting the more I am convinced that the big thing in War is Morale; it is probably the most important single factor" (Schillington, 2011, p. 2). Recently, however, morale is getting even more attention as organizations are learning about the connectedness between morale and organizational performance. In the past, organizations that may have viewed certain negative aspects of their internal cultures as "the way things are" are now realizing that they are risks to their missions. Bowles and Cooper (2009, p. 74) argue that morale is directly correlated with, and a driving factor of, performance and that high-morale employees "will be more engaged, willing to work harder, be more committed to the organization's goals and be stronger advocates of the organization to potential clients and employees."

Positive organizational morale is important for work within any industry or occupation, but it is vital for organizations that provide logistics support to Warfighters around the globe. Morale is the emotional driver that will motivate individuals to maintain focus and belief in the face of opposition. There are inherent stressors in dealing with the unpredictability of supporting DOD customers, and organizations with higher morale will be more inclined to find innovative ways to perform their duties in adverse situations (Derousse, 2015).



Low individual morale can lead to employees not speaking up about organizational problems. Individuals with low morale are less likely to take ownership in processes. Without ownership there is less interest in improvement (Eyres, 2008). A symptom of high organizational morale is that employees will “buy-in” to the organization’s mission and processes and will have a vested personal interest in its overall success. Inversely, employees with poor morale will be inherently more focused on their personal well-being and will not feel relatable amounts of pride or shame in the success or failure of the organization (Bowles and Cooper, 2009). Employees that are disconnected from their organization are more likely to allow poor conditions to fester, risking negative effects on those around them (Eyres, 2008). Cowart (2014) highlights the ultimate detriment to the company when employees become disengaged. This disengagement leads to higher absenteeism, higher costs of doing business and all-around poorer performance. A 2013 Federal Employee Viewpoint Survey with a response rate of nearly 50% of the federal population found that employee disengagement, a side effect of low morale, is the single most important factor in declining productivity (Cowart, 2014).

As the nation’s workforce adapts to an older generation retiring and a newer generation making their entrance into the job market, it is more important than ever for organizations, specifically supervisors and leaders, to be cognizant of the factors that motivate these entrants. Finding ways to stay in touch with individuals and finding their specific motivating factors will lead to a more productive workforce that will find new ways to increase their agency’s capabilities (Derousse, 2015). An ever-changing global environment requires DOD agencies to capitalize on technological advances and find and retain a talented workforce. The next chapter will discuss how telework can affect an organization’s morale.



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III. HOW TELEWORK AFFECTS MORALE

In this chapter we discuss several factors of morale that can be influenced by teleworking. We break these factors down into two sections, individual and organizational, but they all share connections with each other. Individual factors include absenteeism, job satisfaction, and mental health. Organizational factors include retention and recruiting, ergonomics and managing teleworkers.

A. INDIVIDUAL FACTORS

The first individual factor that we will address deals with an employee's availability to complete tasking. Absenteeism defined as "the failure to report for work as scheduled" has a negative effect on an organization's budget and leads to reduced productivity (Ruhle, 2019). There are unavoidable absences from work such as medical conditions or family emergencies and there are avoidable absences that stem largely from individual motivation that supervisors would not see justifiable (Parker, 1995). This lack of motivation to work, or being motivated more to do something other than work, is a part of overall workplace morale.

The likelihood of individuals to voluntarily miss work increases when they undergo increased stress (Lokke & Madsen, 2014). For example, Phillips (2022) finds that telework can be a stress reduction factor and has the potential to assist individuals in finding a better work-life balance. There is a potential tradeoff that must be considered. In high intensity, high stress environments, employees must have the opportunity for some restoration and separation from their workplace responsibilities. Individuals constantly working in their normal place of rest may have issues with separating from the stressors of their professional responsibilities and could diminish the restorative properties of their homes (Hartig, 2007). Bentley et al. (2016) agree that these potential increased stressors are valid but that the flexibility that allows employees to control their social and environmental stressors outweighs the risks if their organizations provide the necessary levels of support.



Organizations that provide logistical solutions to federal agencies must have a staff that is not only knowledgeable about their positional requirements but also highly motivated to provide the best possible solutions to their customer base. If the employees that are required to provide vital support to the Warfighter have increased periods of unavailability, or if their absences are random and unplanned, it becomes extremely difficult to provide the level of service necessary and expected (Parker, 1995).

Telework can be utilized as a method to prevent certain levels of absenteeism. A properly developed telework policy has the potential to allow employees the flexibility to save hours of time commuting every week. According to a study by Flynn (2023), the average American commute one way is just under 30 minutes. That equates to more than 330 hours or almost 2 weeks spent in transit back and forth from work annually. Allowing employees to save time by forgoing their commute allows them time to take care of numerous appointments, chores or quick errands that may have previously caused them to be absent from work. A Telework Exchange study titled “No Free Rides” found that if federal employees were able to telework 3 days a week on average, they would save nearly 100 hours (Adams-Auten, 2005).

Though telework has the potential to mitigate absenteeism, it also creates challenges in how absenteeism must be measured. Measuring absenteeism in the office is relatively simple, either the employee is in the office on a scheduled workday, or not. Allowing employees to telework and maintain flexible schedules changes that equation. Organizations must find ways to measure how well individuals and teams are meeting goals, then find consistent methods to track them. This could be the timeliness and quality of recurring deliverables, participation and preparedness for meetings or timeliness of response to direct messages or emails (Mosquera et al., 2022).

Job satisfaction, another key component in overall employee morale, also has connections with absenteeism in the workplace. According to the Oxford dictionary, job satisfaction is a “feeling of fulfillment or enjoyment that a person derives from their job” (OED 2023). The mutual trust that employees feel from their organization plays a large role in job satisfaction (Diestel et al., 2014). Telework can be viewed as the manifestation



of the trust an organization has for its employees. The organization must trust its employees to operate with a higher level of autonomy to complete their required job functions and be available when called upon. This flexibility also has positive implications for employee motivation and attitudes. Employees that appreciate the trust that has been instilled in them may strive to prove they can maintain the same, or higher, levels of productivity as when they are in the office (Morganson et al., 2009). While this trust is critical in job satisfaction there is also the threat of employees feeling disconnected from their peers and supervisors.

Interdependence between those who work in proximity has become a motivational factor that affects job satisfaction. The feeling that we must complete tasking or maintain levels of productivity so that our colleagues can complete their jobs creates symbiotic relationships. Feldman and Gainey (1997) argue that telework reduces these connections because of a reduced number of face-to-face interactions. This resulting disconnection from peers caused by virtual working hinders peoples' need for affiliations with those they work with (Mendonca et al., 2022). While teleworking employees appreciate the freedom and trust that has been instilled in them, organizations must ensure that the sense of autonomy does not become solitude or the feeling that employees have been forgotten (Whittle & Mueller, 2009). While many employees find office banter distracting, the interactions in office outside of official meetings, even if not related to work, increase the connectivity and interdependence of teams, generally leading to higher job satisfaction (Morganson et al., 2009).

The lack of social interaction, or social isolation, that results from telework also has the potential to affect job satisfaction. Social isolation is a potential byproduct of telework if organizations do not instill and maintain adequate social support structures (Bentley et al., 2015). Providing teleworkers adequate social interaction opportunities, timely feedback, and support on tasking, and ensuring they maintain a certain level of communication with their peers and supervisors are important factors in reducing the potential negative effects of isolation while teleworking (Mann & Holdsworth, 2003).



These social support structures are also critical to maintain mental health among individuals that need social interactions. During the COVID-19 pandemic, mental health became a focal point of maintaining individual and organizational morale. In a study conducted within a municipal government, nearly 50% of the participants felt some level of higher-than-normal stress, burnout or fatigue, or anxiety caused by the pandemic and the resulting COVID-induced job changes (Castillo, 2021). During the pandemic, employees were required to abide by federal, regional, and organizational policies to reduce the spread of the virus while in office. Adding to the anxiety of becoming infected with the virus was the frequency at which these policies were updated at different levels and the resulting confusion or non-compliance with updated guidance. Through this survey there were clear indicators that because of the ability to telework, employees could bypass the inconsistent and ever changing in-office COVID requirements. This led to reductions in depression, pessimism about organization mission accomplishment and fear and anxiety (Castillo, 2021).

If organizations fail to provide the necessary framework to support teleworkers who are dependent upon information systems or supervisor interactions, they may suffer from social isolation. T.A. Bentley et al. (2015) theorized that employees' job satisfaction will increase as organizations provide teleworkers with the necessary social support structures. Their study reported a positive correlation between increased support for teleworkers and the desired outcomes for telework. Meaning, the more support that supervisors provided for their employees while on telework, showing that they genuinely care about the job satisfaction and productivity of their employees, the more that the telework arrangements produced the desired outcomes. Trust and communication are critical factors to the success. The technical support for employees while teleworking must be available to ensure they are able to communicate with their supervisors and co-workers and use their systems effectively, but maintaining the necessary level of trust between supervisor and employees was found to be a key determinant of telework effectiveness (Baker et al., 2006a, 2006b). This virtual environment trust must be earned and given by all parties involved. Co-workers must gain each other's trust in knowing that when relied upon their peers will complete their tasks in a timely fashion to the level



of quality that meets the standards of the team. Employees must also trust that their supervisors will provide the necessary guidance in a way that will support their ability to complete tasks in an acceptable manner.

Baker et al., (2006a, 2006b) argued that while overall telework can reduce employee stresses, it is not without negative impacts. Employees that telework are more prone to increasing their own workload through extending their own hours, and the lack of direct social interactions and direct feedback causes additional ambiguity in their responsibilities. Stress is also another side effect of isolation due to a lowered sense of commitment and feeling out of the loop of the organization's activities (Even, 2020).

B. ORGANIZATIONAL FACTORS

The first factor we will discuss is an organization's ability to reduce voluntary or involuntary departure by employees. Retention includes, but is not limited to, employees leaving their current positions to find better opportunities outside of the organization, or employees that are involuntarily removed from their current positions because they are unable to meet the organization's standards for employment. Perie and Baker (1997) showed that the primary reasons for teachers to depart their current positions and look for opportunities elsewhere were lack of administrative support for their work and the perception that working conditions are more favorable at different workplaces. This study shows the importance of implementing a telework policy that is comparable with what is available at other organizations and ensuring that employees' work conditions in their home offices have similar or better capabilities than their office locations.

Ergonomics, defined as an objective to increase performance, safety, and comfort of individuals, is directly tied to quality of life for employees. Studies developed by National Health Interview Survey (NHIS), Cornell Musculoskeletal Discomfort Questionnaire and Rapid Upper Limb Assessment (RULA) protocols show that poor ergonomic environments can cause health problems that will negatively affect the morale and productivity of employees (Lowe, 2019). Macedo et al., (2020) found that when individuals are more comfortable, and associated their organizations with caring for their comfort, there was an increase in productivity. This article also details that as telework



grows increasingly important and the technologies that support telework continue to develop, the research into home office ergonomics is falling behind. For years organizations have experimented and taken steps to increase productivity in offices by improving the physical work environment. The same, or at least comparable resources must be provided by organizations to ensure their employees have suitable workspaces to complete their tasks in their homes. The detriments of the sedentary work associated with computer-based work can create several chronic musculoskeletal conditions. Workstations that have chairs with inadequate lumbar support, keyboard and mouse setup that cause unnatural positioning or movements and/or severe head inclination have been known to cause or worsen these conditions (Garcia et al., 2022).

The final factor we will discuss is an organization's ability to manage remote workforce. Leadership plays one of the most critical roles in shaping individual and team morale. Supervisor opinions on telework and their ability to capitalize on the benefits and mitigate the risks of telework affects all other aspects of morale (Korkeakunnas et al., 2023). Leaders must be role models for their employees while balancing their influence in work-life balance, job security, performance, and appraisals, while simultaneously maintaining standards and productivity (Larasati & Martono, 2020). A major source of this is the worry that without being within eyesight of their teams they will lose control (Brown et al., 2016). This angst for telework is likely a correctable mindset if those in question received the necessary training on the systems at their disposal as well as best practices on how to manage teleworkers (Jones, 2012).

Zbar (2001) found the first component of successfully managing teleworkers is to set expectations for employees while teleworking that are realistic and align with the level of productivity while in the office. This study also highlights that for a successful telework policy to be adopted by management the "old school" mentality that productivity equals time in the office must be eliminated. Leadership must shift from activities-based management to results-based management (Korkeakunnas et al., 2023). Leaders should be trained to hold their workforces to standards of responsiveness and productivity regardless of where they are conducting their work (Brown et al., 2016). Supervisors must be supportive of their workforce by providing clear and consistent



feedback so that individuals know if they are meeting expectations (Bently et al., 2016). Also critical is the trust among the organization, supervisors, and employees. The flexibility that makes teleworking attractive to workforces can be detrimental to the organization if employees are not transparent about when they will be using their time at home to conduct personal business (Zbar, 2021). Training managers on how they should interact with their teams, how often they should expect to hear from their teams, and the expected response time on communications will help alleviate the common fear from managers of losing control of their teams (Jones, 2012).

While there are pros and cons to teleworking, substantial research indicates that it can be utilized as an effective tool to increase the morale of a workforce. Telework should be viewed as a capability with the potential to bolster workforce job satisfaction, and organizations should actively manage the factors discussed to maximize individual willingness to support the organization and each other. This feeling of pride and common loyalty has a direct impact on the organization's productivity.



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IV. EFFECT OF TELEWORK ON PRODUCTIVITY AND WHY IT MATTERS

Labor productivity is typically defined as output per worker, for example the number of resources or goods produced by a unit, organization, or country, divided by the number of workers needed to produce those goods or resources (outputs). Productivity is a key pillar for any organization, high productivity equals more efficient employees impacting costs and ultimately profitability. Organizations strive to maximize efficiencies and profitability using the fewest number of resources required. The benefits and freedom of telework come with risks and concerns to employee productivity such as distractions, lower management oversight, and communication challenges, however recent research provides supporting data with positive correlations between telework and productivity.

In the last few years, the number of employees teleworking has increased drastically. Prior to COVID-19, only approximately 5% of Americans teleworked (Emanuel & Harrington, 2021). According to a DOD Inspector General report and survey of 54,665 employees, approximately 88.2% reported teleworking full or part-time between March and August of 2020 (DoDIG-2021-065). The remaining 11.8% responded they were either ineligible or their work could not be performed remotely. The results of the survey also provided that 88.1% of respondents felt that their productivity level remained the same or improved while teleworking. Additionally, individuals experienced more flexible hours, decreased commute time and increased work-life balance.

In a large-scale randomized control trial of telework conducted in 2015, Bloom and co-authors found that teleworking led to an increase in productivity by 13%. Of the 13%, 9% was attributed to working more minutes per shift and the other 4% was attributed to taking more calls per minute (Bloom et al., 2015). An additional outcome of the experiment was that attrition fell by 50%. Long-term teleworking and reselection of telework preferences led to a productivity increase of 22% (Bloom et al., 2015). Another study of a travel agency, conducted in 2021, revealed telework increased productivity by 7–8% (Emanuel & Harrington, 2021). A similar study found that workers that were given



more geographic flexibility in a shift from working from home to working anywhere increased productivity by 4.4%, while also eliminating rework (Choudhury et al., 2020).

To investigate telework practices, benefits, and challenges in DOD agencies that provide logistic support we conducted a survey. The following section outlines our methods and details the results of the study.



V. METHODS

In this chapter we discuss our survey participants, details of our survey, and methods of analysis.

A. SAMPLE

To learn about the relationships among telework, morale and productivity, we surveyed several DOD agencies that provide varying levels of logistical support to the Warfighter. The levels of support include operational support to tactical units, systems acquisition, supply chain management and contingency planning. The commands involved include DLA Troop Support Indo-Pacific, DLA Aviation, FLCPH and NAVAIR. We selected these commands because they all have recently developed and implemented individual telework policies. The survey was developed using Qualtrics and the link emailed to distribution lists requesting participation. While the percentage of possible survey participants in our data sample is only a fraction of the total number of employees that make up the DLA, FLCPH and NAVAIR, we believe we captured a microcosm of the total DOD acquisition work force.

B. SURVEY QUESTIONS

The survey had seven questions that measured teleworking behaviors and preferences. These included the number of days that individuals were allowed to telework (0 to 5) and the preferred number of telework days (0 to 5). Average commute time to the office was measured using a multiple-choice question with answers ranging from “up to 10 miles” to “over 30 miles.” Answers that it takes more than 30 minutes were reflected in the survey at 40. It should be noted that this was done to assist in data analysis and that responses of 40 could represent any amount of time higher than 30. Rating of the organization’s implementation of telework policy was measured on a scale of awful, poor, good or outstanding. The impact of taking sick days if not allowed to telework was measured by answering either no; yes, rarely; or yes often. Assessing if an organization has provided an individual with all the necessary equipment to successfully telework was measured by answering no, maybe, or yes. Finally, the importance of telework on future



career or job opportunities was measured on a scale of not at all important, slightly important, moderately important, very important, and extremely important

The survey also included two Likert type matrix tables with 1–5 option scales ranging from 1 = Strongly disagree to 5 = Strongly agree. These measured an individual's perception of their own productivity, and their perception of their team's productivity. Examples of individual morale and productivity questions included: I am more productive while teleworking; I could complete my job while teleworking 100% of the time; and I feel disconnect from my team while teleworking. Examples of the team productivity questions include: My team functions better overall while teleworking; My team communicates more effectively while teleworking; and My team maintains the same level of service to our customers while teleworking.

Finally, there were four open ended or essay questions that allow for individual feedback regarding how the participating organizations implemented their telework policies and how they could be improved. These questions included: How could your organization help you be more productive while teleworking? How could your team increase productivity while teleworking? How could the telework policy have been developed or implemented better? What additional feedback would you like to provide your organization regarding its telework policy.

C. ANALYSIS

The first thing we did was code our variables in Qualtrics to make them identifiable and organized. We extracted the data from Qualtrics and generated summary statistics of the survey responses using SPSS and JMP. In SPSS, we ran a factor analysis script to determine intercorrelations among variables, using varimax rotation to display the best picture of data groupings. We used the information from the factor analysis to identify questions that loaded together, and we used Cronbach's alpha to assess reliability of scales combining those items.

We then assessed the output file and the correlations among variables. We considered the correlations to be significant if the p-value was less than .05. For the open-



ended questions, we exported the responses to a spreadsheet and grouped reoccurring themes.



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VI. RESULTS

A. SURVEY SAMPLE SUMMARY

We ran our survey for one month. We sent it to a total of 266 individuals, from whom we received 92 responses. Of the 92 responses, 82 respondents completed 100% of the survey and the other 10 completed at least 42%. After the first three weeks we had approximately 80 responses, so we sent a follow-up request for participants and received another 12 in the last week. We did not include demographic questions in our survey; however, the sample was collected from DLA Troop Support, DLA Aviation, FLCPH, NAVAIR and includes both civilian and active-duty personnel.

B. SURVEY FINDINGS

1. Multiple Choice Question Responses

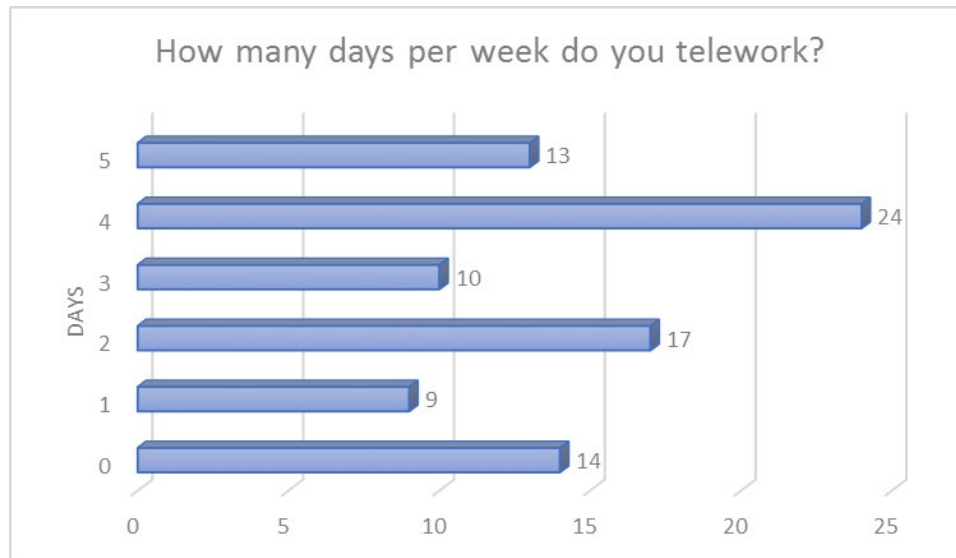


Figure 1. Telework Days per Week

There was a total of 87 responses to this question and 84% responded they telework at least 1 time per week with the greatest population (28%) teleworking four days a week.

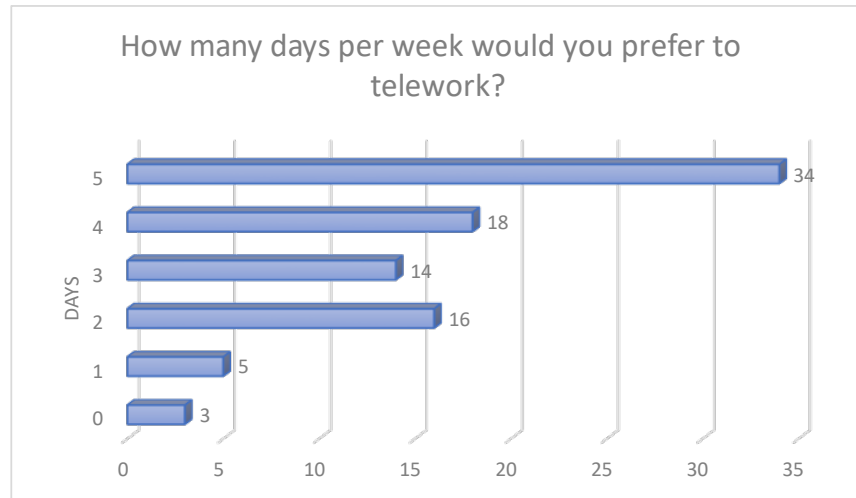


Figure 2. Preferred Telework Days per Week

There was a total of 90 responses to this question and 97% responded they would prefer to telework at least 1 time per week with the greatest population (38%) desiring five days a week.

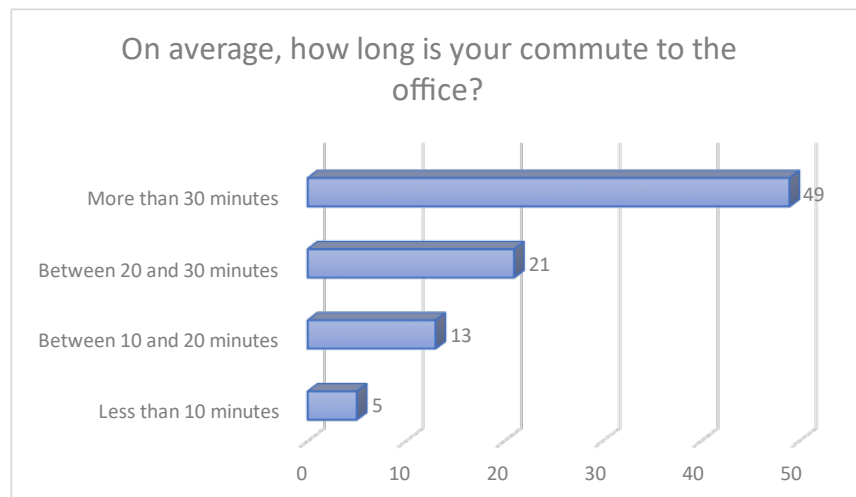


Figure 3. Average Commute Time



There was a total of 88 responses to this question; 80% responded to have at least a 20 minute or more commute to the office, 56% had greater than 30-minute commute and only 6% responded to having a commute of 10 minutes or less.

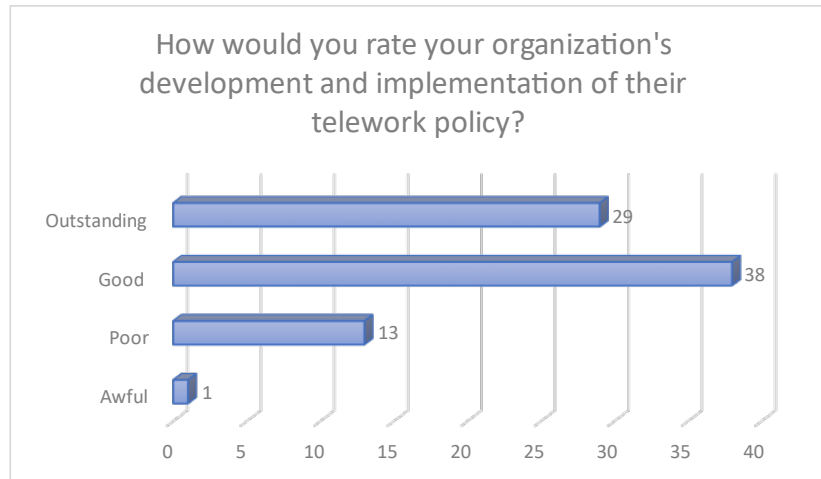


Figure 4. Organization's Telework Policy Development and Implementation Rating

There was a total of 81 responses to this question; 83% indicated that their organization's development and implementation of their telework policy was good or outstanding.



Figure 5. Impact of Telework on Sick Days

There was a total of 82 responses to this question; 40% responded yes, often; 29% responded yes, rarely and 31% responded no. Overall approximately 70% would have taken leave, or a sick day, if not allowed to telework.

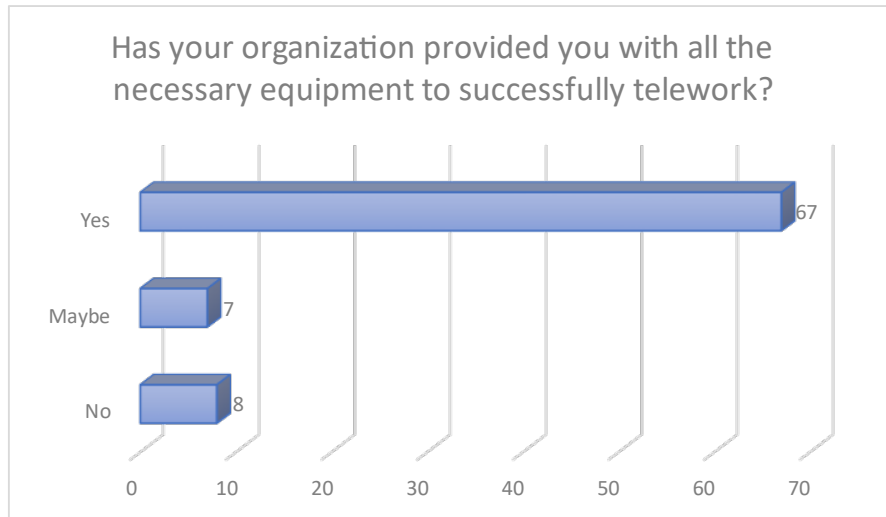


Figure 6. Has Organization Provided Necessary Telework Equipment

There was a total of 82 responses to this question; 82% responded yes to having been provided the necessary equipment to telework while 10% responded no.

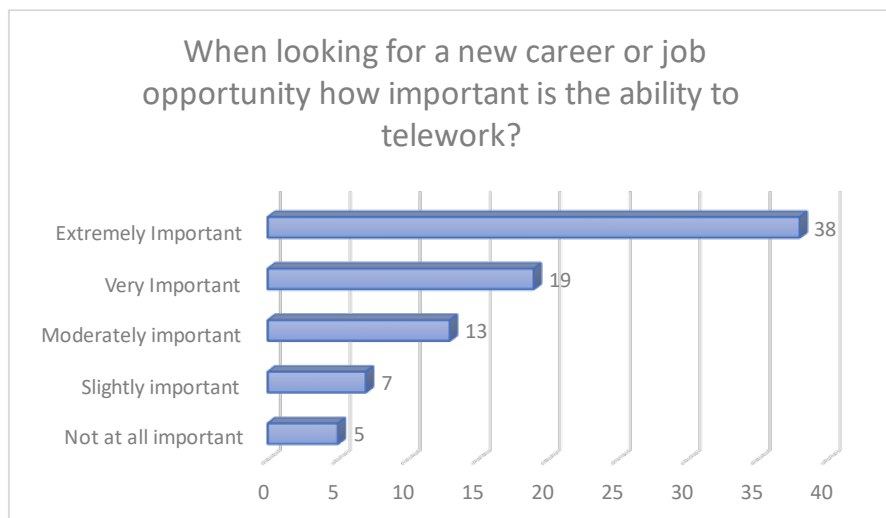


Figure 7. Importance of Telework on New Career or Job Opportunity

There was a total of 82 responses to this question. Of these, 46% responded that telework is extremely important when looking for a new career, and 94% responded that telework is at least slightly important. Only 6% responded that telework is not important at all.

2. Likert Scale Question Responses

The following Figures (8 and 9), measure responses to the degree an individual agrees (green and yellow) or disagrees (red and orange) as related to their personal or team productivity while teleworking.

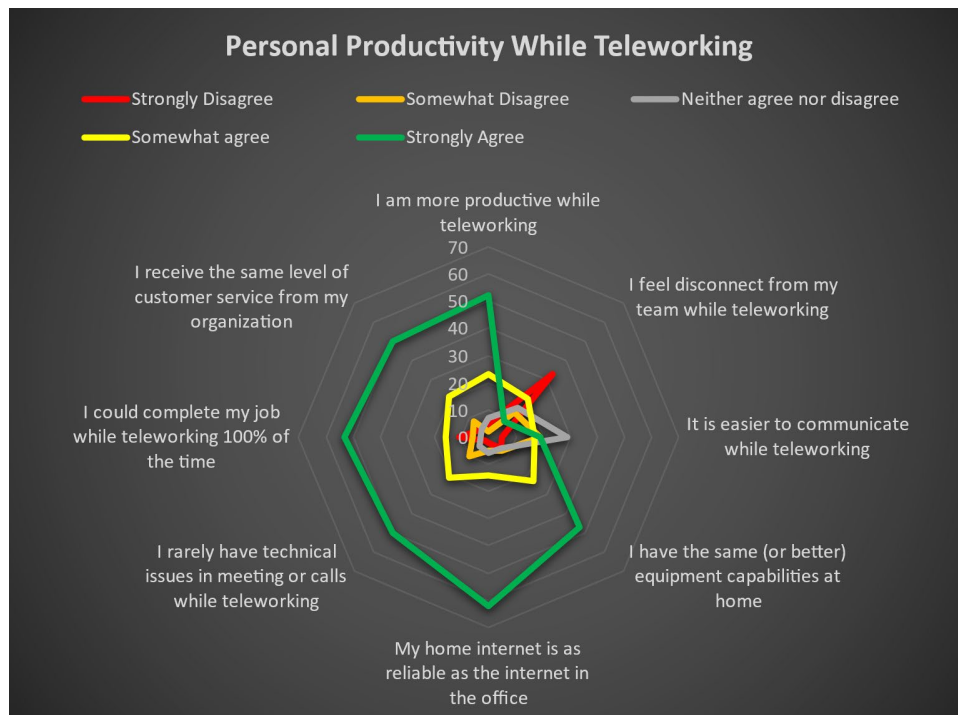


Figure 8. Personal Productivity while Teleworking

There was a total of 89 responses to this series of questions with an average of approximately 60% strongly agreeing to being more productive while teleworking, receiving the same level of customer service, being able to complete their job, having limited technical issues and having reliable internet connectivity. Interestingly, 37% disagreed strongly to feeling disconnected while teleworking, which can impact morale.

Also, approximately 40% agreed to some degree that it was easier to communicate while teleworking.

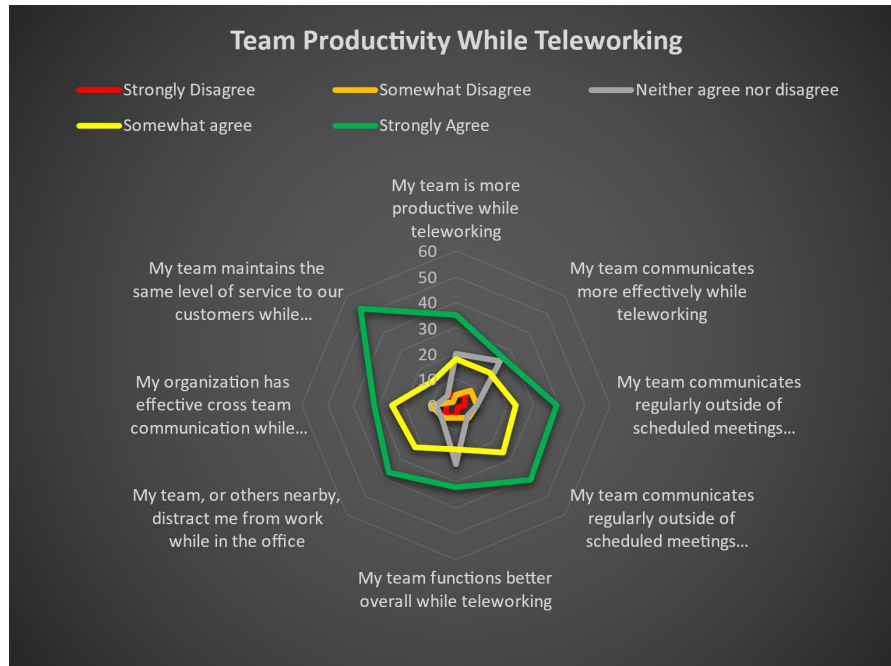


Figure 9. Team Productivity while Teleworking

There was a total of 81 responses to this series of questions. Between 40% and 50% strongly agreed that their team is more productive while teleworking, communicates regularly, and functions better while teleworking. Additionally, 67% strongly agreed that their team maintains the same level of customer service while teleworking as when working from the office. In conjunction with higher levels of communication and productivity, an indicator of morale is distractions while at the office, which 74% agreed to some degree that they were distracted while at the office.

3. Open-Ended Question Responses

The common themes across all open-ended questions can be grouped into a few categories: Communication, Flexibility, and IT Infrastructure. Through each of the questions there were recurring themes in these categories. Communication laterally amongst teams, and vertically through the chain of command is of high importance to

survey participants. Multiple individuals expressed concern regarding the responsiveness of those teleworking, and the necessity for clear guidelines on delayed responses hampering their ability to provide support. Many people addressed transparency from leadership in the development of the policies, truthful reasoning and why policies may vary between teams or regions. Comments regarding transparency also mentioned certain policies being based on supervisor preferences and did not seem to be implemented uniformly across the organization. Multiple comments also recommended allowing employees to provide feedback on the telework policies and adjust accordingly. Several recommendations encouraged eliminating unnecessary meetings as well as embracing collaboration platforms (such as Teams) to enhance communication, bonding, and synergy through teleworking. There was also mention of internal customer support issues between those that were unable to telework due to their responsibilities to support customers and their inability to get timely responses from those that were on telework.

Flexibility was mentioned multiple times as the leading benefit to teleworking. The ability to maintain additional aspects of scheduling to allow for greater life balance was important to participants, and being able to choose which days they telework is also a recurring suggestion for improvement. Flexibility also allowed participants to extend their workday due to the time saved commuting and being able to work during non-traditional working hours such as at night or the weekend to be able to finish important work. Flexibility of the organization was also important for retention and recruitment, as talent may be lost to other organizations with more flexible telework policies.

Finally, IT infrastructure and support was a frequent topic in the comments. Employees desire the same technical capabilities in their home offices as they do in office. An interesting recurring topic was the desire to have dedicated phone lines while teleworking. Many employees are reluctant to utilize their personal cell phones for business so are limited to computer-based applications for communication.

C. FURTHER ANALYSIS

We used factor analysis to group the variables that loaded together. The variables that loaded most in each component were then placed into a reliability test, and we used a



Cronbach’s Alpha score to assess the reliability or internal consistency of the variables. A Cronbach’s Alpha above .7 is useable but .8 is desirable. Using the highest Cronbach’s Alpha scored for each component, we grouped the variables to create a new scale to represent each concept. As a result, those groupings gave us 3 main components (Teamwork Management, Individual Work Management, and Connectivity).

Teamwork Management consisted of 6 variables with a Cronbach’s Alpha score of .921 (Figure 10). The scale score was calculated by averaging scores on all six items. Of note, “how would you rate your organization’s implementation of their telework policy” was included in this factor, but we excluded it from the scale because it did not load strongly, resulting in a lower Cronbach Alpha score of .906. Instead, we chose to analyze it as a standalone variable.

Item Statistics			
	Mean	Std. Deviation	N
My team is more productive while teleworking.	3.94	1.143	78
My team communicates more effectively while teleworking.	3.63	1.196	78
My team communicates regularly outside of scheduled meetings while teleworking.	4.05	1.161	78
My team functions better overall while teleworking.	3.85	1.129	78
My organization has effective cross team communication while teleworking.	3.90	1.223	78
My team maintains the same level of service to our customers while teleworking.	4.37	1.141	78

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.921	.922	6

Figure 10. Teamwork Management Variables Reliability Test



Individual Work Management consisted of 5 variables with a Cronbach’s Alpha score of .850 (Figure 11). The scale score was calculated by averaging scores on all five items.

Item Statistics			
	Mean	Std. Deviation	N
I am more productive while teleworking.	4.29	1.099	87
It is easier to communicate while teleworking.	3.30	1.163	87
I have the same (or better) equipment capabilities at home as I have in my office space.	4.13	1.228	87
I could complete my job while teleworking 100% of the time.	4.08	1.399	87
I receive the same level of customer service (IT, Admin, cross team requests, etc.) from my organization while teleworking.	4.21	1.173	87

Reliability Statistics			
Cronbach's Alpha Based on			
Cronbach's Alpha			
Standardized Items	N of Items		
.850	.854	5	

Figure 11. Individual Work Management Variables Reliability Test

Connectivity consisted of 2 variables with a Cronbach’s Alpha score of .745 (Figure 12). The scale score was calculated by averaging scores on both items.



Item Statistics			
	Mean	Std. Deviation	N
My home internet is as reliable as the internet in the office.	4.45	1.005	88
I rarely have technical issues (internet, hardware, audio etc.) in meetings or calls while teleworking.	4.22	1.119	88

Reliability Statistics			
Cronbach's Alpha Based on			
Cronbach's Alpha	Standardized Items	N of Items	
.745	.748	2	

Figure 12. Connectivity Variables Reliability Test

We included several variables that held significance in the survey and research but did not group together in the 3 components mentioned above. These included commute time, distractions at work, days that individuals would have taken leave if they were not able to telework, and how important the ability to telework is when looking for new career opportunities.

D. SCALE CONSTRUCTION

The first reliability test grouped the Teamwork Management. This grouping was a selection of questions that measure how productive individuals felt their teams were while teleworking. These, as well as all the individual work management and connectivity questions were measured on a 1–5 scale. The average score amongst this group was 3.96, which corresponds to most survey participants agreeing that their teams can maintain productivity levels while teleworking.

The second grouping measured individuals' perceptions of their own ability to telework and resulted in an average score of 4.0. Again, survey participants generally agreed that as individuals they can maintain or excel their levels of productivity while teleworking.



The final scale measured the technical capabilities and reliability of the survey participants when teleworking. The average score of 4.34 indicates that most people have adequate technology to support working from home.

E. RELATIONS AMONG VARIABLES

We used the JMP application to create new correlation and significance tables (Tables 1 and 2) showing relationships among variables.

Table 1. Correlations

	Mean	TeleDays	Preferred#	CommTime	TeamFunction	Distractions	TelePolicy	Absent	CareerOpp	IndivWkMgt	TeamWkMgt	Connectivity
TeleDays	2.6250	1.7175										
Preferred#	3.5730	0.8324	1.4608									
CommTime	32.8736	0.0155	-0.0799	9.2646								
TeamFunction	3.8395	0.5404	0.6725	-0.0705	1.1668							
Distractions	3.9630	0.2404	0.4458	0.0610	0.4893	1.2594						
TelePolicy	3.1728	0.2756	0.2080	-0.1041	0.3927	-0.0723	0.7381					
Absent	2.0976	0.0872	0.2396	0.1362	0.1313	0.2297	-0.1879	0.8405				
CareerOpp	3.9512	0.4071	0.5824	0.0364	0.4981	0.4100	0.1164	0.3254	1.2363			
IndivWkMgt	3.9860	0.4944	0.6580	-0.1018	0.7323	0.4729	0.2173	0.2490	0.5309	0.9779		
TeamWkMgt	3.9829	0.4609	0.5911	-0.0448	0.8594	0.4747	0.3585	0.0843	0.5063	0.7518	0.9889	
Connectivity	4.3315	0.1990	0.2438	0.1308	0.3890	0.3073	0.0179	0.1079	0.3505	0.5598	0.4585	0.9443

Diagonal numbers in Table 1 are the standard deviations for the associated variables.

Table 2. Correlation Probability

	TeleDays	Preferred#	CommTime	TeamFunction	Distractions	TelePolicy	Absent	CareerOpp	IndivWkMgt	TeamWkMgt	Connectivity
TeleDays	<.0001	<.0001	0.8875	<.0001	0.0317	0.0133	0.4389	0.0002	<.0001	<.0001	0.0630
Preferred#	<.0001	<.0001	0.4619	<.0001	<.0001	0.0625	0.0301	<.0001	<.0001	<.0001	0.0213
CommTime	0.8875	0.4619	<.0001	0.5368	0.5936	0.3613	0.2283	0.7483	0.3483	0.6950	0.2272
TeamFunction	<.0001	<.0001	0.5368	<.0001	<.0001	0.0003	0.2457	<.0001	<.0001	<.0001	0.0003
Distractions	0.0317	<.0001	0.5936	<.0001	<.0001	0.5268	0.0404	0.0002	<.0001	<.0001	0.0053
TelePolicy	0.0133	0.0625	0.3613	0.0003	0.5268	<.0001	0.0930	0.3007	0.0513	0.0012	0.8741
Absent	0.4389	0.0301	0.2283	0.2457	0.0404	0.0930	<.0001	0.0029	0.0241	0.4574	0.3345
CareerOpp	0.0002	<.0001	0.7483	<.0001	0.0002	0.3007	0.0029	<.0001	<.0001	<.0001	0.0012
IndivWkMgt	<.0001	<.0001	0.3483	<.0001	<.0001	0.0513	0.0241	<.0001	<.0001	<.0001	<.0001
TeamWkMgt	<.0001	<.0001	0.6950	<.0001	<.0001	0.0012	0.4574	<.0001	<.0001	<.0001	<.0001
Connectivity	0.0630	0.0213	0.2272	0.0003	0.0053	0.8741	0.3345	0.0012	<.0001	<.0001	<.0001

The strongest positive correlations occur among current telework days worked, preferred telework days, teamwork management, individual work management, team functionality while teleworking and importance for future career opportunities. Current teleworked days and preferred telework days had the strongest correlation of $r=.83$ and p



< .0001, with means of 2.62 and 3.57 days respectively. Individuals currently teleworking would like to increase their telework days but some would not like to telework full time. Team functionality while teleworking correlated strongly with telework days ($r=.54$, $p < .0001$) and preferred telework days ($r=.67$, $p < .0001$) and very strongly with individual work management ($r=.73$, $p < .0001$) and teamwork management ($r=.86$, $p < .0001$). Preferred telework days also had strong correlation with importance for future career opportunities ($r=.58$, $p < .0001$). Distractions by coworkers while in the office had positive correlations with most of the other variables, possibly contributing to the higher levels of perceived individual and team productivity when teleworking. Being distracted while at work, and less at home, was also mentioned several times in the open-ended question responses, allowing for greater ability to focus and get work done. Interestingly, commute time had little to no relationship with other variables.

The multiple-choice questions and open-ended questions together align with the notion that telework and increased telework is desired, and individuals believe they can be productive while at home. Respondents reported that they were still able to communicate with their teams and focus as individuals while at home.

F. DISCUSSION

The open-ended questions built on the multiple-choice data and added increased solutions for how the organization can make improvements. In the survey we conducted, 94% stated that they consider the ability to telework to be important when looking for a new job (46% stating it is extremely important). This statistic is essential for supervisors to consider when they are developing new position descriptions and advertising for employment opportunities. With a growing number of organizations within the federal government and in private sector finding ways to successfully implement telework policies, agencies must be willing to offer this work flexibility to new employees. Otherwise, capable candidates will look for opportunities elsewhere.

Each organization should establish its telework policy based on its specific mission requirements, avoiding unnecessary risks to the mission by merely emulating another organization's policy. It is crucial to conduct honest assessments to determine



whether day-to-day activities can be effectively carried out outside the office. In our survey, 82% of the respondents expressed favorable feelings regarding their organization's telework policy implementation. Open-ended feedback offered suggestions for increased early communication on policies as well as input from employees for specific work and social circumstances. Essential recommendations from respondents included leaning into telework capabilities and establishing methods for feedback regarding current policies.

Organizations must also put effort into ensuring that employees' home office setups have the necessary equipment and an internet connection that is similar or better than what is available at their workspace in the office. Employees that do not have the necessary knowledge or capital to procure their own additional assets may be at a disadvantage. Dual monitor set ups have become a norm in most offices but rarely are employees given the two monitors and the necessary adaptors to set them up at home. The technical acumen of employees to be able to set up home offices must also be considered. In our survey, 10% of employees agreed that their home workspaces do not have the same equipment or network capabilities as their office workspace. In conversations with participants, multiple employees from an organization that offers 2 days of telework mentioned that they only use their laptops for work without access to an additional monitor. Some of these were provided an additional monitor but were unable (or unwilling) to set them up. Several others mentioned utilizing kitchen or dining chairs to work at their tables.

G. LIMITATIONS AND FUTURE RESEARCH

This research was limited to perceptions of productivity and morale and did not take actual task completion into account. Future studies that build upon this topic should measure individual and team completion of standard responsibilities at telework locations vs. in office. Further research on telework could also be more beneficial to individual organizations if all survey participants were operating under the same telework policy. To get enough participants to draw valid conclusions the scope of this study was opened to



include multiple logistics agencies that operate under varying telework policies and offer differing levels of technical support and equipment.



VII. CONCLUSION

Telework capabilities have been around for decades, but after the challenges during the COVID 19 pandemic, DOD agencies were forced to utilize and shape their workforces around these capabilities. Through our research, we determined key factors affecting employee morale and what individuals in the organizations we surveyed need to do to be more productive. Our research has shown that while telework poses a different set of challenges compared to on-site work, it also provides significant benefits to morale and productivity. Organizations must recognize these factors and understand how they affect both individuals and teams. They should train workforces on the available ICT capabilities and require supervisors and employees alike to maintain standards regardless of location.

From our research, we have developed several recommendations for organizations to consider when making the decision to implement telework policies. The first recommendation is to ensure the telework policy allows employees to capitalize on the flexibility. Flexibility was a recurring theme amongst our and previous studies as one of the most beneficial aspects of teleworking.

Organizations should be wary of applying blanket telework policies to large workforces. Policies should be developed and implemented at the correct level to allow supervisors the ability to shape policies that best fit their teams. It is also important that organizations provide the necessary level of IT equipment and tech support to ensure employees have the same capabilities at their telework locations as they would in office. This includes but is not limited to business phone capabilities, additional monitors, printers, docking stations, keyboards, mouse, and ergonomic support equipment.

Lastly organizations must ensure that communication does not deteriorate due to teams and individuals not working in a central location. It is imperative that employees are kept in the loop of the decision-making processes. They must be able to provide feedback to open-minded managers who are willing to hold conversations on why various policies were developed and implemented. Supervisors must also be trained on how to



manage teleworkers. There must be clear guidelines on responsiveness to internal and external customers, as well as clear metrics for how people will be evaluated while teleworking. Supervisors must also develop processes that ensure employees remain connected to the team and do not become disconnected or lose sight of the organization's overall mission.

The DOD has long been a frontrunner in the utilization of new technologies. As information and communication technology continues to develop, the DOD will be in prime position to utilize these technological advances to establish and maintain an effective workforce. Whether that includes full-time or situational telework, agencies that provide logistic support to the Warfighter should continue to modernize these capabilities to recruit and retain the best talent and maximize their productivity.



APPENDIX A: TELEWORK POLICY SATISFACTION SURVEY

Introduction ...

We are a team currently enrolled in the Naval Postgraduate School DL and are conducting our Thesis Project titled "Effects of Telework on Productivity and Morale In Defense Supply Chain Management and Acquisition Organizations". The goal of our research is to able provide these organizations with the necessary tools to assist in the successful development and implementation of telework policies, and factors to be aware of that could suggest changes to their policies or implementation strategies may be necessary.

We estimate it will take you 5-10 minutes to complete this anonymous survey. Participation in this survey is entirely voluntary. Failure to respond to any of the questions will NOT result in any penalties except possible lack of representation of your views in the final results and outcomes. You may withdraw your participation in the survey at any time by simply exiting the survey.

Thanks in advance for your participation and assistance with our study.

Very Respectfully,
LCDR Eric Richey (DLA Troop Support IP) & LCDR Shaun McGahan (DLA Aviation)

----- Page Break -----

TeleDays x→ (x)

How many days per week do you telework?

5
 4
 3
 2
 1
 0

Preferred# x→ (x)

How many days per week would you prefer to telework?

5
 4
 3
 2
 1
 0

CommTime x→

On average, how long is your commute to the office?

Less than 10 minutes
 Between 10 and 20 minutes
 Between 20 and 30 minutes
 More than 30 minutes

----- Page Break -----

IndvProd 💡 x→

Please answer the following questions in terms of your personal productivity while teleworking.

	Strongly Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly Agree
I am more productive while teleworking.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel disconnected from my team while teleworking.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is easier to communicate while teleworking.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have the same (or better) equipment capabilities at home as I have in my office space.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My home internet is as reliable as the internet in the office.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I rarely have technical issues (internet, hardware, audio etc.) in meetings or calls while teleworking.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I could complete my job while teleworking 100% of the time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I receive the same level of customer service (IT, Admin, cross team requests, etc.) from my organization while teleworking.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



OrgSupInd 💡

How could your organization help you be more productive while teleworking?

Page Break

TeamProd 💡 X→

Please answer the following questions in terms of your team's productivity while teleworking.

	Strongly Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
My team is more productive while teleworking.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My team communicates more effectively while teleworking.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My team communicates regularly outside of scheduled meetings while teleworking.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My team communicates regularly outside of scheduled meetings while in the office.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My team functions better overall while teleworking.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My team, or others nearby, distract me from work while in the office.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My organization has effective cross team communication while teleworking.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My team maintains the same level of service to our customers while teleworking.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

IncrProd 💡

How could your team increase productivity while teleworking?

Page Break

TelePolicy X→

How would you rate your organization's development and implementation of their telework policy?

Outstanding
 Good
 Poor
 Awful

ImpiBett 💡

How could the telework policy have been developed or implemented better?

Absent X→

Are there days you would have taken leave, or a sick day, if not allowed to telework?

Yes, often
 Yes, rarely
 No

Equip X→

Has your organization provided you with all of the necessary equipment to successfully telework?

Yes
 Maybe
 No



CareerOpp x→

When looking for a new career or job opportunity how important is the ability to telework?

- Not at all important
- Slightly important
- Moderately important
- Very important
- Extremely important

AddFeed 💡

What additional feedback would you like to provide your organization regarding its telework policy?



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APPENDIX B: NOTEWORTHY RESPONSES TO OPEN-ENDED QUESTIONS

a. *“How can your organization can help you be more productive while teleworking.”*

“Increased communication at all levels of leadership, more effective meeting structures”

“Remove stigma that employees are not being attentive to duty while teleworking.”

“Provide information sharing and knowledge management platform (TEAMS & SharePoint) development and facilitated training.”

“IT Infrastructure can be improved by providing mirrored workstations and equipment for use at home with same levels of software access.”

“Provide the initial outputs to perpetually process my duties for the Warfighter. Initiate clear guidance on the telework process and accept that it is how most agencies operate.”

“We consistently have intermittent teams issues, sometimes video no voice, and sometimes hearing no voice or video. In order to be more productive they could resolve connectivity issues with teams for better communication from either location.”

“Fully embrace it and complete the IT infrastructure to support it. Operations went off without an hitch during the pandemic, but Increased tech improvements would make working from home seamless.”

“Plug and play mirrored set up, two monitors, docking station, etc. Seamless transition from work to home and back to work”

“Matching Equipment with workplace.”

“The only thing I feel I need is another docking station so I can connect my headset without sacrificing my keyboard or mouse due to the new laptop limited plug ins.”



“Provide direct MS Teams phone number or work cell phones so we do not have to worry about international calls for oversea customers or provide our personal numbers when reaching out customers or vendors.”

“My organization could provide me a cell phone or access to a landline that routes through my laptop. I currently use my personal phone for work which is not ideal.”

“Provide the necessary equipment, larger desks, monitor holders, storage, etc. Additionally, increase the communication at the leadership level. In smaller groups information is distributed quickly and updated as needed. However, leadership stalls in providing details to subordinates with little to no details.”

“I am a better asset when I am in the office as I can get involved and learn more due to the opportunity in office presents that telework doesn’t. For job specific, productivity is not lost.”

“Teleworking saves me commute time, allowing for more overtime availability to accomplish mission-essential work.”

“I am more productive than if I am limited by in-office working hours Monday through Friday. If the system goes down as it almost always does on Friday afternoons, and I have not completed my data entry by close of business, I am able to resume my work during the off hours as I have my computer available at home to do so.”

b. “How could your team increase productivity while teleworking?”

“I think team building events could help build communication.”

“More communication.”

“Folks just need to be attentive of the tools avail for communications.”

“Coordinate office days to be the same day(s) of the week.”



“People who are teleworking do not answer phones promptly, nor do they respond to e-mails in a timely manner. What takes minutes or hours in the office sometimes takes days to accomplish with teleworkers because of the lack of timely responses”

“Productivity increases as people are sitting in front of their workstations longer as they start earlier and finish later as they are at home not having to deal with traffic.”

“Have better GFE (government furnished equipment) for employees, like more robust laptops, cell phones, and peripherals”

“More tools and capabilities opened up, similar to EAGLE leave management and increased tools access within MS Teams.”

“This teams internal and external communications is the key to our success, teleworking amplifies the ability to focus on the job at hand.”

“Some of my colleagues would benefit more if they have the ability to make phone calls from home as well. However, the work around is still efficient enough to allow for contact in a timely manner.”

“Some people are just plain lazy in office so when they telework they become even lazier. I feel telework is not for everyone. There are quite a few on my team that should not be allowed to telework. Unfortunately, they do things “one size fits all” here so they can’t recall only certain individuals back into office full time while others remain teleworking.”

“The cross-team communication across the command is lacking and is more than a ‘single point of failure.’ Lost in the mix is that THE SHIPS AND SUBS (The customer) are NOT @ telework....and so when they need help or assistance, departments that CANNOT work IOT support the customer on the waterfront and reach back to the other departments that are teleworking, expectation is that they are AVAILABLE and REPLY in a timely fashion. If telework personnel are NOT going to respond to requests for support or RFI’s, the only option is to WORK in person @ their brick and mortar office.”



“People who are teleworking do not answer phones promptly, nor do they respond to e-mails in a timely manner. What takes minutes or hours in the office sometimes takes days to accomplish with teleworkers because of the lack of timely responses.”

“Getting more people on board to use Teams screen sharing and other collaboration tools rather than just phone calls”

“Just as in person. Come to meetings prepared to discuss the documents.”

“Ensuring personnel are adequately trained to be self-sufficient and to do their assigned duties while teleworking.”

“Coordinate office days to be the same day(s) of the week”

On the question of how could the telework policy have been developed or implemented better, responses focused on earlier, consistent, and transparent communication. In addition, recommendations highlighted that the chosen policy should allow for flexibility based on the specific job requirements and considerations of individual employee circumstances or obligations, such as childcare.

c. How could the telework policy have been developed or implemented better?

“Allow telework by individual needs, parents, children, medical etc.”

“Allow supervisors to maintain communication with their employees. There should not be a push by leaders especially knowing the thought patterns of face to face has placed a damper with employees. Stop pushing their ideology of telework on the employees. What works for one employee may not work for another.”

“Obtaining feedback from staff”

“More input from the workforce.”

“This type of survey should have been issued to determine if changes to the telework policy were needed.”



“For an on-the-fly solution during the pandemic, this forced experiment worked perfectly. The more formal solution that followed still provides maximum telework as well as flexibility.”

“Certain divisions (i.e. IT Department) should be more easily accessible. “Have you called NMCI?” should not be the standard answer.”

“Organizations could and should have the trust in their employees to allow for telework full time. For more than 2 years of the pandemic supervisors and leaders were told that we were ALL REMOTE ALL THE TIME and everything worked well. Leaders were happy about our performance. Vaccines become available, and all of a sudden now we need everyone in again, using buzzwords like “team, community, togetherness, etc.” All this, in my opinion, served to do is sever trust between leadership and employees for being duplicitous in their motivations.”

“Need a clear cut & concise COMMAND policy on WHITE COLLAR business rules when teleworking. Understand if the command DOES NOT employ or possess enough work cell phones for issue to ALL telework PERSONNEL. Technology has closed the gap that allows instant communications to occur via MS Teams via AUDIO & VIDEO. ALSO need to know from a policy perspective IF all white-collar employees will NO LONGER telework...or if an Ad Hoc telework basis is allowed. (Need to see an updated command policy....not the generic NAVSUP HQ telework pilicy dated 2021 or 2022).”

“Being specific and Including telework options in the Position Description. though allowed, some supervisors have strong personal feelings against it due to previous employees and this does not necessarily apply to the person in the current position.”

“I think transparency. Currently most local telework people are getting paid locality but not reporting to the office at all. But people are not being accepting I to remote telework. Policy is dependent on supervisor preference instead of across the organization.”

“More communication and input on Policy. Not having different telework policies based on work area. (i.e. Some have more telework days/opportunities, Philly has only 1 day in the office, etc.)”



“Treat employees as professionals who are diligently accomplishing their daily tasks.”

“Have better communication throughout all positions and open forums where everyone can be further included during the development of policy and reasoning behind decisions made as an agency before implementation to create buy-in amongst the workforce. Subordinates will always operate effectively under policies that they believe helped shaped directly.”

“Include the representatives from all areas of workforce to provide input

“Embrace flexibility in approving full-time telework positions.”

“With more input from employees.”

“Earlier communication to leadership of pending changes and implementation expectations. Leadership and Supervisor training on best practices for running a virtual organization.”

d. What additional Feedback would you like to provide your organization regarding its telework policy?

“My biggest reason for being pro-telework is the importance of retention and recruitment. I worry that we will lose great talent to other agencies/organizations with more flexibility.”

“Telework must be embraced by the entire organization to work effectively. Remote meeting tools and collaborative platforms like Teams add significant benefit for communicating, meeting with groups, etc... leadership must embrace this technology at the very top to ensure maximum productivity.”

“Continue to support your employees based on needs for different individuals.”

“Management communication is extremely important so that our members of the group get the same message. This can be an email, a conference call or meetings via Teams. I find that aspect to be lacking for our group.”

“KEY point would be flexibility”



“Remove yourself from the old school mentality. Find out what the people of the organization need to be successful, and support them. Open yourselves up to the possibility of creating something extraordinary. Not simply teleworking, but creating new methods of communication, of bonding, and of synergy through teleworking. Create true work life balance, versus just saying its important.”

“If half of the command can telework, reutilize the empty space for other tasking. There is a floor in the building that is basically half empty due to teleworking employees.”

“Telework / Remote work for computer-based employees should be the norm, not the exception. Metrics, leadership, attitudes need to be adjusted to reflect that work can be accomplished in a remote environment without degrading productivity. IF leadership cannot justify their inability to adapt to a new environment, then they should be looking elsewhere. Morale and trust suffer when leadership is not adapting to what the team wants.”

“Providing the requisite level of equipment, resources and written guidance to the workforce is vital to mission success. If dept & divisional management (& ultimately) the workforce is not allocated the needed resources AND guidance, this ultimately impacts mission effectiveness. Losing personnel to stagnant command policy also occurs, and the burden of logistical support shifts to remaining management & personnel, which strains mission effectiveness.”

“In my personal experience with working with others who are teleworking it makes my job significantly more difficult and time consuming. People do NOT communicate as effectively while teleworking as they do in the office.”

“Well, as I previously mentioned, the ability to telework has positively affected my work completion abilities and has positively affected my morale.”

“Telework has increased productivity by allowing dedicated quiet time to complete work by having complete control over interruptions and unsolicited visits/meetings.”

“Telework stays should have nothing to do with promotion potential.”



“More transparency and truthful reasoning on policies and why they are different among areas and locations.”

“Consistency is important and before implementing anything that differs from headquarter policy should get employee buy-in before implementation.”

“Flexibility to change the days of telework.”

“Allow for trust that one is being accountable for their work and being present to communication while teleworking.”

“Telework is great; however, the organizational culture and personnel integrity are equally important in implementing a telework program.”

“Request feedback from employees on how they feel about telework. More sensing sessions regarding telework if issues arise. Would definitely suggest more than one day of telework for employees. Majority of employees can 100% complete their job on the computer, which can be done in the home. However, returning to the jobsite has given employees a bit of anxiety, so keeping the option to telework, especially more than one day, gives them a belonging to an organization that allows flexibility but still completes the required mission.”

“Keep it available and liberal. The same people working hard in the office work hard from home. The same who don’t contribute in the workplace don’t contribute at home. Location doesn’t matter. I work on leave/TDY from airports, hotel rooms, cars, on flights, or wherever I can use a hotspot.”

“Flexibility is key.”

“Teleworking has severely hurt our Navy. Sailors on ships do not telework, why would support staff.”

“Telework can provide a great incentive tool in hiring and can saving time lost previously traveling to/from to work.”



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