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Motivational Communication Strategies for Virtual Teams

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Walden University

College of Management and Technology

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Monica Metri

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Walden University 2022

Abstract

Motivational Communication Strategies for Virtual Teams

by

Monica Metri

DPT, New York Institute of Technology, 2010 BS, New York Institute of Technology, 2008

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

Walden University

August 2022

Abstract

Organizational leaders may not communicate effectively to motivate their virtual team members to achieve goals. Leaders who lack communication strategies to motivate virtual team members can lead to dissatisfied employees and increased timelines to achieve project goals for their organization. This may adversely impact the accurate and timely achievement of goals, reducing profits and thereby, shareholder returns. Grounded in Herzberg's two-factor theory, the purpose of this multiple case study was to explore leaders' communication strategies to motivate virtual team members to achieve project goals. The participants consisted of eight virtual team leaders in the northeastern United States who successfully implemented communication strategies to motivate their virtual team members within the past year (July 2021- July 2022). Data was collected using video conferencing and telephone semi-structured interviews and a review of public company documents. Through thematic analysis, three themes were identified: (a) leaders used multiple communication tools, (b) had a frequency of communication, and (c) provided feedback to their teams. A key recommendation for leaders to motivate their virtual team members to accomplish goals is to increase their communication using different communication tools and provide adequate clear feedback to their virtual team members. The implications of this study for positive social change include the potential for virtual team leaders to improve job satisfaction and motivation among virtual team members, resulting in enhanced rapport by understanding how to prevent dissatisfaction within their organizations.

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Dedication

I dedicate this study to my parents, Jan and Yvon Metri. They immigrated to the United States to provide my brother and me with opportunities we would not have had if it were not for their bravery and commitment to our wellbeing. I also dedicate this study to my friends and family, who have supported me through this journey. I would not have been able to finish without your support.

Acknowledgments

I want to thank God for giving me the mental stability to continue this learning path and not give up. As written in Philippians 4:13, "I can do all things through Christ who strengthens me." I relied more and more on that quote to carry me through to the end. Consistency and persistence were also crucial in accomplishing this goal.

Thank you to Dr. Liz Musil, my chair, for taking my calls and answering my questions when I was unsure where to turn! Thank you to Dr. Sylnovie Merchant, my second chair, and Dr. Deborah Nattress, my URR, for your support and feedback. I would not have been to complete this Doctoral journey without you!

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Section 1: Foundation of the Study

Positive communication is essential for bringing people together to solve problems, complete tasks, and carry out projects for an organization (Muthusamy, 2019). In a virtual team, communication is done through various channels because face-to-face communication may not be possible. Therefore, positive communication can create influence and motivation (Muthusamy, 2019). Effective communication motivates individuals to work together towards accomplishing goals (Mahesar et al., 2020). Sharing transparent communication regarding employee safety, the organization, and the organization's potential impact on society creates a positive relevance in the community (Hategan et al., 2020).

Background of the Problem

The increase in globalization and improved technology throughout the years have increased virtual teams (Mysirlaki & Paraskeva, 2020). The option of using information and communication technologies brings people together without having a face-to-face meeting within a traditional office (Müller & Antoni, 2020). When participants are not familiar with the information tools used, the result can be ineffective communication and not having a shared mental model to accomplish goals (Müller & Antoni, 2020). Therefore, leaders who use effective communication strategies create trust, transparency, and credibility to motivate individuals to work together towards an objective (Ataguba & Ataguba, 2020).

Leaders of virtual teams who build relationships and provide clear communication inspire team members to improve performance (Newman et al., 2020). To foster a

successful virtual team, flexibility, empathy, adaptability, creativity, and emotional intelligence are needed (Bennett & McWhorter, 2021). Technical skills in combination with soft skills are fundamental; these, along with proper training and policies, ensure that virtual teams can adapt to changes in the future (Bennett & McWhorter, 2021). Understanding the benefits of effective communication to motivate virtual team members is essential for achieving a given project's goals.

Problem Statement

Virtual team leaders who communicate effectively can motivate their team members to achieve organizational goals and improve productivity despite challenging cultural and geographic barriers (Lauring & Jonasson, 2018). According to the U.S. Bureau of Labor Statistics (2019), 25 percent of the American population, about 36 million salaried employees, occasionally work from home. The general business problem is that some leaders do not communicate effectively to motivate their virtual team members to achieve goals. The specific business problem is that some leaders lack communication strategies to motivate their virtual team members to achieve project goals.

Purpose Statement

This qualitative multiple case study explores communication strategies leaders use to motivate virtual team members to achieve project goals. This study's target population is five virtual team leaders in the northeastern United States who have implemented successful communication strategies that motivate their team members to achieve project goals. Motivated team members can influence positive social change

initiatives within their communities, creating job satisfaction and improving performance (Andrade & Westover, 2020). Positive social change implications include the potential for achieving more significant results while solving problems that may benefit communities.

Nature of the Study

The three research methods are qualitative, quantitative, and mixed (Hendren et al., 2018). Researchers who use a qualitative method use open-ended questions to discover what is occurring or has occurred (Yin, 2018). A qualitative researcher develops an in-depth understanding of a situation by presenting various views and key themes (Kalman, 2019; Lenger, 2019). In contrast, a researcher who employs the quantitative method uses closed-ended questions to test hypotheses about variables' characteristics or relationships (King et al., 2019). Mixed-method researchers include both qualitative and quantitative methods (Tang et al., 2019). Using hypotheses to test variable characteristics or relationships is not needed to address this study's purpose; therefore, the mixed-method and quantitative methods are irrelevant (Bloomfield & Fisher, 2019). Thus, the qualitative method is the appropriate approach for this study to develop a deep understanding of team leaders' effective communication strategies for motivating virtual team members to achieve project goals.

Four qualitative research designs that could be applicable for the proposed study on communication strategies for motivating virtual team members are (a) ethnographic, (b) narrative, (c) phenomenological, and (d) case study. Ethnographic designs focus on researchers observing people's cultural habits in their environments (Kvarnström et al.,

2018). Due to the geographical spread of virtual team members, it is challenging to communicate person-to-person with participants in different geographic locations; hence, the ethnographic design is not suitable. Narrative researchers focus on listening to participants tell their personal stories and life experiences (Nolan et al., 2017). Narrative researchers depict a story through the participant's perspective (Chang & Lin, 2020). The limitation of the narrative design is the time it takes to build rapport and have the participants believe there is a genuine interest in the participant's feelings and ideas (Nolan et al., 2017); therefore, this design is not optimal. Phenomenological researchers require participants to share personal meanings of their experiences with phenomena to interpret and recognize associated themes (Nanduri, 2018). Phenomenological researchers interpret and find associated themes to understand better the phenomena effects on participants (Torcivia Prusko et al., 2020). A phenomenological design would not apply to this study because this study is not focused on understanding the participants' personal meanings of being members of virtual teams. A researcher who uses a case study design investigates a case in the original setting to understand how and why decisions are made (Weishäupl et al., 2018). A case study is an appropriate design for exploring how virtual team leaders effectively communicate with their team members and motivate them to achieve goals (Weishäupl et al., 2018). A multiple case study is the most appropriate design for this study because the ability to compare results supports the validity of the study's findings (Yin, 2018).

Research Question

The following research question guided the study: What communication strategies do leaders use to motivate their virtual team members to achieve project goals?

Interview Questions

- 1. What communication strategies are you currently using to achieve your virtual team's project goals?
- 2. How do you know which communication strategies are more successful than others?
- 3. How have you measured your virtual team's productivity for achieving its project goals?
- 4. Which communication strategies have proven to be the most successful for motivating virtual team members to achieve their project goals?
- 5. If you have identified the most successful strategies, what are your organization's key processes to implement them?
- 6. What are the key barriers you have identified in implementing your communication strategies?
- 7. How did you address these barriers?
- 8. What else can you share with me about your communications strategies for motivating virtual team members to achieve their project goals?

Conceptual Framework

Herzberg's two-factor theory is the conceptual framework for my proposed study. In 1959, Fredrick Herzberg, Bernard Mausner, and Barbara Bloch Synderman developed Herzberg's two-factor theory, which explains factors affecting employee motivation.

Herzberg et al. (1959) described employee motivation based on two types of factors: motivation and hygiene. The hygiene factors are considered company policy and administration, working relationships, status, security, and supervision. According to Herzberg's two-factor theory, hygiene factors are a requirement for maintaining job satisfaction. If leaders cannot sustain hygiene factors, then employees will not be satisfied with their jobs and become unmotivated. Examples of motivation factors are recognition, the nature of the work, responsibility, advancement, growth, and achievement.

Motivation factors catalyze an employee's optimal performance based on the maintenance of hygiene factors. Therefore, I expect that Herzberg's two-factor theory will enable me to understand the communication strategies leaders use to motivate virtual team members to achieve goals and improve productivity.

Operational Definitions

Information and communication technology: Technology tools for communicating using email, video conference systems, text messages, chat programs, and file sharing systems (Müller & Antoni, 2020).

Shared mental model: Team members having similar knowledge structures related to work-related aspects based on expertise and characteristics of the task (Müller & Antoni, 2020).

Virtual teams: A geographically dispersed group of team members working together towards a goal using technology to communicate (Dulebohn & Hoch, 2017).

Assumptions, Limitations, and Delimitations

The purpose of this qualitative multiple case study is to explore communication strategies leaders use to motivate virtual teams to accomplish project goals. The following subsections explain the assumptions, limitations, and delimitations of this study to provide transparency between the researcher and the reader (Bistline et al., 2021; Flórez-Parra et al., 2017; Ross & Bibler Zaidi, 2019).

Assumptions

An assumption is the belief of a theory or subject to be accurate but cannot be confirmed (Hu & Plonsky, 2021). I assume that participants will want to share their experiences to help others do well with their organizations. I presume all interview questions will be answered accurately, honestly, and to the best of the participant's ability. I assume participants will not have alternative motives when participating in this study, such as getting paid more or impressing their superiors. I also presume unfairness will not play a role when the participants share their experiences to make themselves look better compared to other participants or other employees within or outside of their organization.

Limitations

A limitation is considered a weakness that may be out of the researcher's control and related to the research design, statistical model, or other factors (Theofanidis & Fountouki, 2018). A limitation of this study is having only leaders of northeastern United States participate in this study. I did not include global leaders to prevent obstacles due to language barriers. Another limitation is I did not include employee feedback regarding

effective leadership communication strategies that motivate virtual team members to accomplish goals. I only included participants who were leaders of virtual teams to participate in this study. Leaders who want to participant in this study may limit their answers and not be forthcoming with information when answering open-ended questions about their communication strategies.

Delimitations

Delimitations are considered the boundaries the researchers set for themselves for the study to be achieved (Theofanidis & Fountouki, 2018). This study's delimitation is the geographic region of the northeastern United States; therefore, this study cannot be generalized. I focus the research study on what communication strategies leaders use to motivate virtual team members to accomplish goals; consequently, I do not address other issues. Another delimitation is the inclusion criteria set for participants. These criteria are to ensure alignment with the research question. The inclusion criteria of participants exclude leaders who are not virtual team leaders who were successful with their communication strategies to motivate team members.

Significance of the Study

Contribution to Business Practice

Virtual and traditional teams can find it challenging to create a meaningful connection and foster trust. Motivating virtual team members is even more challenging due to the varying environments in which every employee resides and the lack of face-to-face interaction (Gilstrap, 2019). Employees who trust their leadership have a sense of ownership that can produce positive outcomes and foster creativity for their

organizations; this gives the organization a competitive advantage regardless of an employee's location (Browne et al., 2016). Organizational leaders who understand each virtual team member's needs and culture may tailor communication effectively to build trust and motivate each team member to increase their synergy and productivity, thus creating a competitive advantage for the organization (Aina & Verma, 2019).

Implications for Social Change

The implications for social change include leaders gaining a better understanding of how to effectively communicate with virtual team members to create a sense of belonging and collaboration to accomplish the team's goals. Leaders may understand how to use motivational communication strategies to bring people together, regardless of location, to work on a shared purpose, creating a unity that enhances team performance to benefit the organization's customers (Zec & Matthes, 2018). These leaders solve problems by positively impacting different areas, such as healthcare, non-profits, and community safety groups (Hargreaves et al., 2016).

A Review of the Professional and Academic Literature

Virtual teams have become the usual way of doing business in multiple organizations. The simplicity of the technology and the various technological options make it easier for different people to stay connected and work towards a unified goal. As with any business, there are challenges. Having a virtual team can be more challenging due to the lack of face-to-face interactions. I examined the literature concerning the research question: What communication strategies do leaders use to motivate their virtual team members to achieve project goals?

The literature includes information on (a) virtual teams, (b) virtual team communication, and (c) virtual team performance. I used the following databases to find peer-reviewed articles Google Scholar, Proquest, Ebsco, Scholarworks at Walden University. I used the following keywords and phrases: *virtual teams, virtual team productivity, virtual teams and communication, virtual teams and productivity, and virtual team leaders.* There are 138 works cited in the literature review, of which 130 (94%) are peer-reviewed and 131 (95%) published between 2017 and 2021.

I present the literature review in subtopics. The first section is on Herzberg's two-factor theory conceptual framework and complementary and alternating theories. The second section within the literature is focused on virtual teams, virtual team characteristics, challenges, and benefits. The third section is virtual team communication, communication tools, leadership, trust, and motivation. The fourth section incorporates virtual team performance challenges.

Herzberg's Two Factor Theory Conceptual Framework

I used Herzberg's two-factor theory (Herzberg et al., 1959) for this study's conceptual framework. According to Herzberg's two-factor theory, motivation and hygiene factors work in coexistence (Herzberg et al., 1959). The hygiene factors are in place to prevent job dissatisfaction, and the motivating factors are to increase job satisfaction, which can lead to employee motivation. Both factors work together and do not work independently of each other to encourage employee motivation. Looking through the lens of Herzberg's two-factor theory of 1959 (Herzberg et al., 1959), leaders

can acknowledge different elements that can contribute to job dissatisfaction and assist employee motivation (Holliman & Daniels, 2018).

Herzberg's two-factor theory is based on Herzberg and his team interviewing 200 employees about their job (Herzberg et al., 1959). Herzberg wanted to understand what factors made the employees feel satisfaction or dissatisfaction in their job. Based on the interview results, hygiene factors helped prevent job dissatisfaction if they were in place. Motivation factors enabled employees to work and feel better about their job but did not necessarily prevent job dissatisfaction.

According to Herzberg's two-factor theory, employers should keep hygiene factors at optimal levels to prevent job dissatisfaction (Herzberg et al., 1959). Hygiene factors are considered the basics of job sustainability, including pay, relationships, physical working conditions, status, security, and benefits. If the hygiene factors in a job are not always optimal, then employees may have job dissatisfaction. Examples of job dissatisfaction from hygiene factors could be a lack of payment or decreased payment (Butt, 2018; Hammonds, 2017). These examples can be a factor in which employees feel dissatisfied with their employer, contributing to a lack of employee motivation (Butt, 2018; Hammonds, 2017). Another consideration that can add to unmotivated employees is the working environment (Hammonds, 2017). Employers should consider being fair in pay and caring for working environments when considering factors contributing to work dissatisfaction and employee motivation. Hygiene factors maintained optimally can add to employee motivation when employers use motivation factors. The different factors can apply to various jobs and locations throughout the world.

The hygiene factors are not the only thing that can motivate an employee. Herzberg's (Herzberg et al., 1959) motivation factors can encourage employees to work for their organization and provide their best knowledge and resources. Examples of motivation factors are job acknowledgment and recognition. These are factors that millennials look for when applying for jobs (Ruiz & Davis, 2017). Millennials may also feel motivated when they know there are opportunities for growth within their organization (Ruiz & Davis, 2017). Habib et al. (2017) suggested that organizations incorporate Herzberg's motivation factors (Herzberg et al., 1959) into employee performance reviews. Incorporating Herzberg's motivational factors (Herzberg et al., 1959) into employee performance reviews may motivate employees to achieve their goals within the alignment of the organization's objectives (Habib et al., 2017). Therefore, it is crucial to understand which factors contribute to employee motivation (Hur, 2018). Understanding what motivates the organization's employees working globally and their distinctive age groups can create organizational success (Hur, 2018).

A virtual team involves employees working together towards the same goal (Maduka et al., 2018). Each employee within the virtual team can have a different motivating factor for accomplishing the goal. Individual circumstances can contribute to employee motivation or lack thereof (Hur, 2018). The Herzberg two-factor theory (Herzberg et al., 1959) is relevant to this study in understanding potential factors contributing to employee job satisfaction and employee motivation. Leaders should consider using the Herzberg two-factor theory as a lens to identify factors that can contribute to job dissatisfaction and improve employee motivation. This is especially true

for virtual teams that lack face-to-face interaction and depend on their working environment, technology, and motivation to accomplish their organization goals (Crawford & Meiring, 2018).

Complementary and Alternating Theories

Maslow's hierarchy of needs theory (1943) is like Herzberg's two-factor theory in that both acknowledge employee motivation (Staempfli & Lamarche, 2020). Maslow's hierarchy of needs starts at the base with basic physiological needs such as water and food. The second layer is safety, which can relate to job security. The third and fourth layers are social and esteem needs to create a sense of belonging and respect. The last and final segment of Maslow's hierarchy of needs is the topmost layer labeled self-realization needs for development and growth (Staempfli & Lamarche, 2020).

According to Maslow's hierarchy of needs, the foundational layer becomes fulfilled before advancing to the next layer creating motivation (Staempfli & Lamarche, 2020; Stefan et al., 2020). Maslow created the theory likely to represent a ladder that can lead to each step or to move backward if needed. According to Bridgman et al. (2019), Maslow's hierarchy of needs was depicted in a pyramid years later because it was easier to remember. The management industry wanted to use the theory to help understand how to motivate their employees. The original intent of Maslow's hierarchy of needs is to explain human needs. Organizations and managers have adopted this theory to understand how employees are motivated (Bridgman et al., 2019; Stefan et al., 2020).

Some critics believe Maslow's hierarchy is not a great depiction of motivation because individuals may not have all aspects of each step fulfilled before moving forward

to the next step (Bridgman et al., 2019). Each person's personality and situation are different, making it hard to satisfy each level, which, according to Maslow, is required (Bridgman et al., 2019). Herzberg's two-factor theory does not have a hierarchy to fuel motivation but can contribute to motivation if hygiene factors are acknowledged. Maslow's and Herzberg's theories can be considered complementary theories, but Herzberg's two-factor theory focuses on this study. Herzberg's theory describes hygiene factors that can create job dissatisfaction. Preventing job dissatisfaction by maintaining hygiene factors can encourage motivation when using motivational factors such as acknowledgment and recognition.

In virtual teams, the exchange of information requires communication technology. The wrong communication platform used for virtual teams can cause job dissatisfaction (Savu, 2019). A dysfunctional communication platform is a hygiene factor that promotes dissatisfaction. Effective communication through the correct forum and incorporating motivation factors may encourage achieving a given project's goals. Therefore, Herzberg's two-factor theory was considered the best theory to use for this study.

McClelland's need theory (1985) suggests individuals are motivated by power, affiliation, and achievement (Rybnicek et al., 2019). According to McClelland, the need theory of 1985 states people motivated by power like to have control over a situation and may prefer to be highly visible. Those individuals motivated by affiliation are more social and desire to work in group settings. People who fall into the category of being motivated by achievement like to make sure they accomplish tasks and are on target to meet their goals.

Employees can fall into either category depending on their situation (Rybnicek et al., 2019). Burk and Wiese (2018) report that McClelland's needs theory is dependent on the chosen employee's career pathway (Burk & Wiese, 2018). An example Burk and Wiese (2018) provide is if a person has chosen to be in academia versus working within an industry. The person who works in academia may be motivated through research, putting them into a category of achievement. In contrast, an individual motivated by working in a particular industry to become a manager may need to feel powerful (Burk & Wiese, 2018).

Everyone's motivating factor is different depending on the individual need with which each person finds relation. Saif and Ghania (2019) suggest that a person's experience can also motivate how they react to a situation. Employees who have had prior experience may be encouraged to continue performing their job to the best of their ability if they have the achievement factor based on McClelland's need theory (Saif & Ghania, 2019). Herzberg's two-factor theory does not require an employee to have prior experience or be in a particular field of employment to be motivated. It does require motivation factors to be used for employees to be motivated regardless of profession or experience.

Virtual Teams

Virtual teams have grown in popularity throughout the years, and some growth is due to globalization (Alaiad et al., 2019; Clark et al., 2019). During the year 2020, the covid 19 pandemic allowed companies to grow virtual teams due to the necessity for maintaining human safety. According to the U.S. Bureau of Labor Statistics 2021, work

from home had risen 42 percent for employees, which nearly doubled from 2019. During that time, virtual teams grew out of necessity but maybe the new norm for some organizations.

Organizations recognized that virtual teams are beneficial but, at the same time, come with multiple challenges (Tan et al., 2019). As many as 71% of virtual teams are not successful (Clark et al., 2019). As technology advances and the familiarity of being in a virtual team grows, these numbers may change. Feitosa and Salas (2021) account a successful virtual team to a leader who can make adaptations and hold a team together through changes. Therefore, leaders should acknowledge the many variables that may contribute to virtual team failures and successes.

Virtual team characteristics. Virtual teams require a particular set of characteristics for ensuring success (Schulze & Krumm, 2017). These characteristics include empathy, flexibility, and motivation when working with various people (Clark et al., 2019; Schulze & Krumm, 2017). Members of virtual teams need those characteristics to develop positive relationships for building trust and understanding amongst their team members while using communication technology due to the lack of face-to-face interactions (Gaur, 2019). Ensuring team members participate in training is essential for having a successful virtual team (Schulze & Krumm, 2017). Leaders must also be effective communicators, primarily because of the lack of face-to-face communication and increased communication technology (Browne et al., 2016).

Virtual teams require members to understand and relate with each other using different communication forms that are not face-to-face. Organizations that provide

emotional intelligence training for being in a virtual team create synergistic teams leading to enhanced performance (Holtz et al., 2020). Team members who can relate to each other and create a positive working environment produce motivation, leading to improved performance (Holtz et al., 2020). Being mindful of other people's emotions while lacking face-to-face interaction can encourage synergistic team effort towards the same goal, creating positive group dynamics and promoting the achievement of project goals.

Virtual team challenges. Technology and globalization have made finding new talent in different locations easier than before (Eisenberg & DiTomaso, 2019). However, some of the challenges contributing to unsuccessful virtual teams include the lack of face-to-face meetings (Dulebohn & Hoch, 2017; Tan et al., 2019). Virtual teams can be made of groups of people speaking various languages and having cultural disparities, which can cause misunderstandings, especially with a lack of face-to-face interaction (Goldstein, & Gafni, 2019). Virtual teams can be made of different employees working in different time zones. This can lead to a difference in each employees timed commitments and planning (Barbosa et al., 2019). The differences can create misunderstanding and miscommunication (Stratone & Vatamanescu, 2019; Usher & Barak, 2020). Therefore, leaders must be cognizant of cultural differences and exhibit cultural intelligence to prevent conflicts while working together towards a goal (Nederveen Pieterse et al., 2019; Presbitero, 2019).

Cultural and diversity elements are essential to consider when managing virtual teams. Cultural and diversity differences include speaking a different language and having different language expectations. Back and forth discussions may be hindered by

language barriers (Varhelahti, & Turnquist, 2021). Misunderstandings and miscommunication between the team members can lead to a lack of knowledge sharing and even social loafing (Jiang et al., 2018). Team members may choose specific communications tools such as text or email based on the ability to rethink certain words before sending a message (Varhelahti, & Turnquist, 2021). Leaders must make a conscientious effort when choosing the right communication tool to help prevent misunderstandings between team members (Gallego et al., 2021; Varhelahti & Turnquist, 2021). This can make managing a virtual team more challenging than managing a traditional team (Dulebohn & Hoch, 2017; Gallego et al., 2021; Stratone & Vatamanescu, 2019; Varhelahti & Turnquist, 2021).

According to Gallego et al. (2021), language, training, and clear communication are good practices for virtual team leaders to apply. Virtual team leaders must be non-biased and communicate effectively to create a successful virtual team (Dulebohn & Hoch, 2017; Stratone & Vatamanescu, 2019). A virtual team leader who cannot lead their team effectively will be a contributing factor to a non-successful virtual team (Dulebohn & Hoch, 2017; Stratone & Vatamanescu, 2019). Understanding virtual team challenges can mitigate some of the challenges when managing a virtual team.

Working in a virtual team to accomplish a project can be challenging. According to Krawczyk-Bryłka and Nowicki (2020), virtual team members who are not fully invested and interested can be seen as socially lazy and have difficulty managing their time leading to less individual contribution to the virtual team. As a response, other team members also contribute less to prevent being taken advantage of (Robert, 2020).

Social isolation can also be a factor in a virtual team. When team members feel socially isolated in a virtual team, their contributions tend to be less (Morrison-Smith & Ruiz, 2020). Virtual team members tend to feel their work is less visible and do not contribute as much, leading to less motivation (Florea & Stoica, 2019). This creates a challenge for leaders of virtual teams and other team members if working on a codependent organizational project. Over time, this leads to team members not being able to complete their work and accomplish organizational goals leading to a decrease in virtual team performance (Robert, 2020). However, in the same report by Krawczyk-Bryłka and Nowicki (2020) the authors also reported positive experiences working in virtual teams to accomplish goals. Members take responsibility for acknowledging different roles and create better communication and relationships in team projects solving problems together instead of individually.

Although virtual teams have their challenges, there are different ways to mitigate those challenges. A team provided with competencies to assesses different talents can provide virtual team leaders with an understanding of how their team is comprised (Paul & Turtle, 2020). Emotional intelligence within the virtual team members is also vital in maintaining a virtual team's well-being and encouraging cooperation while accomplishing projects (Gamero et al., 2021). The challenge of a virtual team can be overwhelmingly complex and the success of a virtual team can be prevented if leaders and members of the team do not fully understand how to work with each other.

Virtual team challenges are multidimensional. The lack of visual cues, communication technology glitches, and a decreased clarity in roles contribute to

difficulty in achieving project goals (Sluka, & Brence, 2020). Virtual team leaders require good communication to set clear instructions and expectations while providing their team members with proper training to use the communication tools appropriately (Gallego et al., 2021; Sluka & Brence, 2020). Ensuring good communication with the right set of tools can encourage positive relationships amongst team members, leading to trust and support (Sluka, & Brence, 2020). Leaders should keep in mind the importance of multimodal efforts to keep virtual teams engaged and supported. This encourages team motivation and job satisfaction for accomplishing team goals.

Benefits of virtual teams. Despite challenges with virtual teams, there are also many benefits of being on a virtual team for an organization and for the employee. Being on a virtual team is a time-saver for the employee, and travel expenses are reduced, which is an advantage of virtual teams (Varhelahti & Turnquist, 2021). Virtual teams can also be a cost-saver for organizations (Barnowska & Kozaryn, 2018; Qasem & Qusef, 2019). Reduced heat and electricity consumption in offices with the decrease in commute to offices, a reduction of carbon footprint is evident (El Geneidy et al., 2021). This allows companies and employees to contribute to positive social changes for climate change (Contreras et al., 2020). However, as the covid-19 pandemic continues to change economic practices and companies continue to adapt to those changes, the carbon footprint of organizations and employees can also change.

In the year 2020, companies were forced to create opportunities working in virtual teams due to the covid 19 pandemic. These opportunities were challenging at first but with time, familiarity and adaptations became more familiar (Klonek et al., 2021). Virtual

teams provide opportunities for companies to work with people of various cultures (Dai et al., 2019). According to Berberoglugil (2020), a cross – cultural competency should be required while working in a virtual team. This provides virtual teams to grow in cultural competence (Verzella, 2018; Wang et al., 2017). A company with employees who are culturally competent can help decrease misunderstanding during exchanges.

The ability to recruit from anywhere and understand cultural mannerisms can help minimize misunderstanding in a virtual team, creating a successful virtual team. Both the organization and employee can benefit from opportunities being on a virtual team in an organization regardless of culture. Organizations benefit by recruiting talent from anywhere with fewer restrictions, and the employees benefit from having a wider variety of jobs to choose from (Berberoglugil, 2020). The ability to recruit talent and exchange information quicker from different areas using proper technology encourages opportunities for organizations (Berberoglugil, 2020; Wang et al., 2017). The exchange of ideas within different groups can create a positive dynamic benefiting the employee and employer.

Virtual team performance derives partially from exchanges amongst virtual team members. Knowledge sharing can help organizations make decisive decisions by finding solutions (Pariser et al., 2019). The selected communication tools and platforms are essential for knowledge sharing (Zhu, 2019). Ideas and knowledge sharing can help grow interests and expand on collaborative ideas while working in a virtual team (Yan et al., 2019). Doing things differently from other organizations and thinking creatively by

having virtual teams work collaboratively can improve organizational outcomes and create a competitive advantage (Dai et al., 2019).

The covid-19 pandemic has changed the way organizational members communicate and exchange ideas. Although it may have been challenging at first to switch from traditional teams to virtual teams, the effectiveness of a virtual team can lead to many benefits (Garro-Abarca et al., 2021). Organizations that utilize virtual team members as resources for creative ideas can improve team performance and growth opportunities for employers and employees (Newman & Ford, 2021).

Communication

In a virtual team, team members may not have the luxury of having multiple technology tools for interaction. Virtual team leaders require effective communication styles using the correct technology tools that connect with all team members despite their location. A leader's style can support a more significant employee following and encourage virtual team members to make autonomous decisions (Boulu-Reshef et al., 2019). A communication style that inspires and empowers employees versus direct one-way communication tends to build confidence and autonomy (Boulu-Reshef et al., 2019). An empowering style boosts two-way communication between employees and leaders, leading to better outcomes (Boulu-Reshef et al., 2019).

An effective communication style from virtual team leaders requires strategic thoughtfulness. Communication technology amongst virtual teams may lack the visual cues received during face-to-face interaction, especially when multiple people are on the same communication tool platform. Video technology such as Zoom and Microsoft teams

video calling can reduce the ambiguity amongst peers when collaborating on projects to accomplish team goals (Morrison-Smith & Ruiz, 2020). However, team members may not feel comfortable turning on the video feature, and leaders should encourage participation as an in-person meeting.

Leaders have to create a safe environment for employees to have discussions and help prevent conflicts through communication technology (Leontev, 2019). Training managers and developing leadership competence can help mitigate some of the issues that arise from using communication technology in virtual teams (Bhardwaj et al., 2017). Motschnig and Guver (2017) recommend creating a communication model with different aspects in mind. These include organizational, structural, functional, and interpersonal communication relationships as a guide, especially for new virtual team leaders. A guide for novice leaders can create confidence and improve knowledge in communicating effectively amongst virtual teams (Motschnig & Guver, 2017). Leaders who build open communication environments encourage satisfaction amongst team members and job satisfaction, leading to achieving virtual team project goals (Leontev, 2019).

Virtual team leaders and team members must build relationships through communication technology to achieve their project goals. Communication between virtual team leaders and team members should start early from beginning a project to build a relationship (Yoo & Kanawattanachai, 2001). Early communication amongst team members encourages knowledge sharing to produce a shared mental model in achieving project goals (Yoo & Kanawattanachai, 2001). Leaders should build a safe environment

that stimulates knowledge sharing and encouragement. This creates a positive atmosphere for virtual team members to trust each other (Eisenberg & DiTomaso, 2019).

During projects, leaders who increase communication promote collaboration to create a better-quality, proficient product (Gunasekare & Dharmasiri, 2019). An increase in communication amongst leaders and team members produces trust and increased productivity to achieve project goals (Gunasekare & Dharmasiri, 2019; Papagiannidis & Marikyan, 2019). Leaders who create an inclusive digital climate boost collaboration and innovation (Bennett & Bennett III, 2019; Cortellazzo et al., 2019; Eisenberg & DiTomaso, 2019; Singh & Vanka, 2019). The correct tool used for team communication is vital to ensuring open communication. In turn, it builds trust, leading to increased productivity (Papagiannidis & Marikyan, 2019).

A positive environment for team members addresses the necessary working conditions and produces a sense of belonging to the organization. In turn, it yields team well-being contributing to positive team performance and job satisfaction (Poulsen & Ipsen, 2017; Singh & Vanka, 2019). Herzberg's two-factor theory (Herzberg et al., 1959) aligns well if virtual team members feel comfortable sharing their work conditions considered hygiene factors while leaders incorporate motivation factors as part of their communication strategies. This leads to virtual teams achieving a given project's goals.

Providing feedback encourages increased communication and awareness of projects, improving communication frequency and coordination (Mclarnon et al., 2019). Feedback can also improve team function and performance of tasks (Mclarnon et al., 2019). Prompt feedback helps prevents misunderstanding leading to improved virtual

team performance (Jahagirdar & Bankar, 2020). When providing feedback, it is crucial to ensure the feedback is not taken in an offensive manner (Walter et al., 2017).

Clear communication and feedback through a written form can give structure and long-term reference to mitigate misunderstanding (Kogl & Silvius, 2019). Asking if team members understood all aspects of communication and discussions is vital to ensure all virtual team members agree on understanding the task at hand (Lockwood & Song, 2020). Clear communication and mitigating misunderstanding through increased communication and feedback are essential in virtual teams to improve performance.

Effective communication can create a safe environment for sharing interpersonal information and knowledge to build relationships and encourage trust (Glikson & Erez, 2019; Gunasekare & Dharmasiri, 2019). In a virtual team, leaders must ensure a virtual safe space community for increasing knowledge absorption, leading to improved team performance (Glikson & Erez, 2019; Ur Rehman et al., 2019). Team satisfaction also increases when employees feel part of a safe environment to share discussions (Leontev, 2019). Therefore, effective communication is vital in a virtual team to achieve a given project's goals.

Virtual teams require constant communication that is clear and concise to manifest positive performance (Lapp et al., 2019). Communication provides a better understanding of each team member's learning habits and thought processes (Lapp et al., 2019). Increased communication amongst virtual teams can cost-effectively reduce conflict while encouraging team cohesion (Joubert & Swart, 2019). Virtual team performance demands effective communication in achieving project goals. Therefore,

understanding how to communicate effectively with team members through motivational communication strategies may inspire virtual team performance.

Leaders of virtual teams necessitate effective communication for their team members to improve team performance. Leaders who communicate with their virtual team members and ensure that they have proper training before working in a virtual team encourage organizational commitment and engagement (Moradi et al., 2017). This commitment and engagement promote virtual team performance efficiency and productivity (Moradi et al., 2017). Leaders who communicate and provide higher-level support during training and cognitive skills training programs encourage virtual team members to work effectively (Dumitrașcu-Băldău & Dumitrașcu, 2019; Moradi et al., 2017).

Virtual teams are becoming more prevalent as technology continues to advance. Virtual teams are interdependent for tasks and must trust each other to create positive team performance (Abarca et al., 2020). Leaders must communicate clearly to understand and handle information properly (Abarca et al., 2020). They must also empower team members to make decisions encouraging autonomy (Abarca et al., 2020). Communication between a leader and their team is vital for creating a positive culture to inspire virtual team performance, leading to a competitive advantage in accomplishing project goals.

Communication tools. Over the years, technology has emerged as a very crucial element for organizations to use for opportunities. Technology and communication tools facilitate connecting different people worldwide to work together on projects without having limitations to their location (Kim et al., 2020). However, this is still challenging

due to the lack of face-to-face interaction (Kim et al., 2020). According to Kim et al. (2020), virtual team effectiveness is dependent on good training with communication tools and approaches pertained to minimizing cyberloafing. Incorporating good practices with a robust virtual team can mitigate potential issues and motivate employees to observe new and upcoming technology as an opportunity rather than a conflict.

Virtual teams use communication tools to collaborate on a shared purpose or project. The right communication tool chosen for a project can impact productivity (Zhu, 2019). The availability and accessibility of communication tools can improve the efficiency of project completion. Leaders must be conscious of the different challenges arising from the chosen communication tools, the platform, and the varied cultures involved. Providing training to employees creates awareness and understanding, which will lead to accomplishing the virtual team's project goals (Dumitraşcu-Băldău & Dumitraşcu, 2019; Savu, 2019).

Projects worked on by multiple people require time and space for collaboration. The right communication tool can create a cost-effective environment for collaboration (Godin & Pridmore, 2019). The challenge is ensuring the communications tools were chosen for the project work effectively (Laitinen & Valo, 2018). Versatile communication tools may aid team performance by providing different ways to work on projects to accomplish a given project's goals (Parlamis & Dibble, 2019).

A successful team requires multiple aspects to ensure success. One of those characteristics is creating relationships. Due to the lack of face-to-face interactions in a virtual team, different communication tools can encourage relationship building using a

video feature. Although video features seem like an impediment to privacy, employees feel inclusive within a team, especially in different locations (Siemens, 2020). The covid-19 pandemic has escalated the use of video communication technology within organizations to work on projects (Varhelahti & Turnquist, 2021). Video communication technology helped team members continue building their relationships by including the visual cues that would have been missed if just using a communication tool that does not include video (Varhelahti & Turnquist, 2021).

As video communication technology grows in popularity, the question remains how often to include a video feature with the microphone and when to turn it off.

An example that Siemens (2020) shared is an office environment with video and the option to keep the microphone on all the time, versus turning the microphone on and off. Video technology with microphone can encourage face to face communication to build relationships but when does keeping the video technology with microphone on infringe on privacy? To prevent the invasion of privacy, leaders must use video technology and technology used for transparency with caution to avoid the invasion of privacy (Morrison-Smith & Ruiz, 2020).

Virtual team leaders must understand how to utilize different technologies to communicate and share information with their team (Gilstrap, 2019). Leaders must have accessible technology for improving work transparency without infringing on privacy. This is necessary for enhancing virtual team member motivation and decreasing isolation (Morrison-Smith & Ruiz, 2020). Communication technology features can adapt to the team's best fit to encourage collaboration and cohesiveness to accomplish team goals.

A leader who encourages open communication creates a sense of belonging and collaboration, fostering trust (Darics & Gatti, 2019). The communication platform that encourages increased communication makes a difference in how people can communicate, such as instant messaging or shared whiteboards (Darics & Gatti, 2019). The communication tool used can encourage communication amongst members, help prevent employees from feeling lonely, engage in processes within organizations to inspire a competitive advantage using new and upcoming technology (Larkin, 2017).

Leaders can also target the type of communication platform used towards different age groups. Millennials use instant messaging and chatting services more than other generations (Larkin, 2017). Communication platforms such as social network platform tools can help develop relationships with different ages, such as millennials, creating a sense of belonging and familiarity (Larkin, 2017). This can encourage engagement with the various generations to communicate together on the same platform. Relationships built through familiar communication tools amongst different generations may promote trust and lead to better outcomes for organizations.

Creating habits to build trust through communication technology is essential for success (Williams et al., 2019). Showing emotion and interaction through communication using technology software builds relationships and may inspire trust (Clear & MacDonell, 2011). Using communication tools that can see expressions can reduce member isolation and encourage teamwork and cohesiveness, mitigating problems (Morrison-Smith & Ruiz, 2020). Knowledge sharing among virtual team members is beneficial for increasing interaction and engagement, leading to a trusting environment

(Ur Rehman et al., 2019). A safe sharing environment encourages trust and increases information absorption (Ur Rehman et al., 2019).

The proper communication tools can also assist employees in completing repetitive tasks and encourage flexibility for taking part in different opportunities (Bayón Pérez & Jerónimo Arenas Falótico, 2019). Although options may arise using communication tools, employees must be motivated and self-directed (Lim, 2018). According to Herzberg's two-factor theory (Herzberg et al., 1959), when hygiene factors are maintained optimally, job dissatisfaction is reduced, allowing motivation factors to empower employees. Communication tools are a hygienic factor that should be optimized to prevent job dissatisfaction.

Leadership

Virtual teams require leadership to embed positive and effective communication for achieving project goals. Transformational leadership is a popular leadership style based on motivation, stimulation, influence, and individual consideration for improving team performance (Eisenberg et al., 2019; Garro-Abarca et al., 2021). According to Mysirlaki and Paraskeva (2020), transformational leadership contributes to virtual team effectiveness, including satisfaction, performance, and viability. Transformational leadership encourages followers to maximize their potential performance (Morrison-Smith & Ruiz, 2020). Dependent on the virtual team leadership style, it is important to influence virtual team members to improve performance.

Leaders who influence members can encourage positive behaviors and promote successful teams. Not only does transformational leadership have an influential factor,

but this leadership style also encourages motivation in its members. According to Garro-Abarca et al. (2021), transformational leadership can boost motivation in virtual teams. Transformational leaders can potentially derive from emergent leaders within the group. Emergent leaders tend to influence team members without formal authority (Morrison-Smith & Ruiz, 2020). Both styles are similar in influencing team members, which can lead the team to successful outcomes.

A leadership style that has multiple leaders is called a shared leadership style. A shared leadership style is where team members share leadership responsibilities leading each other to the end goal and may even replace traditional responsibilities (Morrison-Smith & Ruiz, 2020). Although shared leadership can be helpful for virtual teams, organizations require training sessions to encourage shared leadership (Morrison-Smith & Ruiz, 2020). This type of leadership style takes time to develop a good dynamic within the group to prevent conflict.

Different types of leadership styles may work for having a successful team. A democratic leadership style may work well with some virtual teams but getting a consensus takes time that many teams may not have (Garro-Abarca et al., 2021). An operational leadership style may work well with virtual teams because of the clear differentiation of roles. The potential negatives of an operational leadership style may be the amount of work a virtual team member puts in may not be what a virtual team member wants to put in (Garro-Abarca et al., 2021). In comparison, a coaching leadership style provides employees with the freedom to establish their own goals to benefit personally accomplishing their own identified goal. This leadership style may

lack structure for clarification of roles and tasks since this type of leadership has the team member develop their own (Garro-Abarca et al., 2021).

A coaching leadership style allows employees to establish their own goals to benefit from personally. This style can help virtual teams and their members but may lack structure for clarification of roles and tasks since this type of leadership has the team member develop their own goals (Garro-Abarca et al., 2021). This leadership style is like empowering leadership style where the leader shares power with individual team members while providing a supportive environment. The negative to this leadership style is if the team member does not have situational awareness and therefore cannot benefit from this leadership style (Morrison-Smith & Ruiz, 2020).

Leaders are an important part of virtual teams. A 2021 quantitative study by Garro-Abarca et al. showed 317 virtual team companies during the pandemic, showing that leadership had a significant role for virtual teams. Team members performed better when leaders were able to lead members during organizational changes and challenges. Leaders who were trusted amongst their teams could improve virtual team performance (Garro-Abarca et al., 2021). The limitation of the study is the size of the company the virtual team members were constructed for team projects with which they were already familiar.

Leaders may not have the capabilities to lead a virtual team without the proper training. Organizations should consider implementing leadership training programs that incorporate emotional intelligence and transformational leadership qualities to encourage virtual team effectiveness (Mysirlaki & Paraskeva, 2020). Organizations should integrate

training programs for leaders on emotional intelligence and their virtual team members. Virtual team members who received training on emotional intelligence heightened their team performance (Holtz et al., 2020). This led to improved trust and even more collaboration amongst the team (Holtz et al., 2020).

According to Holtz et al. (2020), team members who were trained on emotional intelligence could achieve a higher level of effectiveness. Emotional intelligence incorporated into training is essential for preventing conflict and motivation. The team's emotional intelligence can heighten team performance leading to improved trust and further collaboration (Holtz et al., 2020). Although this study proved the importantance of emotional intelligence with virtual teams, the results cannot be generalized due to the small sample size and participant bias.

The type of leadership exhibited by leaders of a company can either inspire success or destroy a company. Ineffective leadership can cause negative well-being for employees, creating stress and low performance (Dolce et al., 2020). Training is essential for managing a virtual team to be transparent and clear; moreover, the expectations regarding outcomes versus day-to-day operations are imperative for sustainability (Dolce et al., 2020).

Organizations need to acknowledge the importance of transformational leadership and its impact on accomplishing a virtual team's goals. Incorporating motivational communication strategies can be part of transformational leadership. Communication from a leader can influence employee motivation, and transformational leadership has the qualities to do that (Garro-Abarca et al., 2021). According to Turesky et al. (2020),

transformational leadership was more effective than transactional leadership in virtual teams, especially in resolving conflict. However, Morrison-Smith and Ruiz (2020) reported transformational leadership is influential when members are closer together in the distance than further away and more dispersed. Therefore, instilling policies and ensuring specific training for virtual team leaders in preventing destructive leadership can encourage success (Dolce et al., 2020).

Each virtual team is different, and it is best to determine which leadership style works best for the group to function most effectively. Crucial factors to consider are location, time zone, culture, communication technology, and relationship development with people on the virtual team are vital for improving project performance (Eisenberg et al., 2019.) Transformational leadership is challenging if all the principal pillars are not incorporated. Therefore, according to Eisenberg et al. (2019), due to the dispersion of virtual team members between time zones and the various cultures, transformational leadership may not be the most appropriate leadership style for virtual teams.

Virtual team leaders need different skill sets than traditional team leaders because of the need to balance communication technology, soft skills, and emotional intelligence; these are necessary to motivate virtual teams to accomplish project goals (Alward & Phelps, 2019). Leaders of virtual teams must be flexible and adaptable while communicating changes through technology to ensure the team has a shared vision (Denney, 2019). Leaders must also be culturally aware of their team members to certify that everyone is working towards the same goal (Nederveen Pieterse et al., 2019). Although conflicts are inevitable, leaders can use disagreements to understand team

members better and positively build relationships (Shahzad et al., 2019). Despite the challenges with virtual teams, a good leader can make all the difference in improving team performance (Liu et al., 2019). Leadership style and understanding how to motivate virtual team members through effective communication can create positive outcomes, achieving its project goals (Kelly & MacDonald, 2019).

Leading a virtual team can be challenging, especially if it is an uncommon practice. The Covid -19 pandemic forced many leaders to become virtual team leaders, which was an uncommon practice for many organizations. Leading a virtual team takes different skill sets, and many challenges can arise from different external factors.

Leaders must consider their team members' technology tools and working environments to be productive (Bekirogullari & Thambusamy, 2020).

Leaders must exhibit emotional intelligence and engagement with their team members to encourage autonomy and trust for achieving organizational goals (Bekirogullari & Thambusamy, 2020). Leadership communication focused on achieving organizational goals instead of being overwhelmed by daily operational details is essential for success with a virtual team and its organization (Bekirogullari & Thambusamy, 2020). Hence, virtual team leaders must display a different skill set than traditional leaders because trust, engagement, and technical competence are essential for increasing productivity and achieving project goals. Leaders must be emotionally intelligent when communicating and engaging all virtual team members to encourage participation and interaction.

As technology continues to advance and organizations adapt to it, leaders must also adapt to using technology tools within their environment. Training for the proper use of technology tools is vital for completing tasks but should not be overlooked by the importance of soft skills in a team (Gulati & Reaiche, 2020). Gulati and Reaiche (2020) refer to soft critical skills like emotional intelligence, communication, motivation, and conflict resolution. The two researchers recommended that soft skills be used in training managers to gain proper skills, especially in a digitalized world (Gulati & Reaiche, 2020). Managers who did not have soft skills training were motivated to use their soft skills based on self-assessment, mentoring, team members, employee engagement, and believing proper communication is vital for success (Gulati & Reaiche, 2020). Although training on technology use and devices is essential, leaders should not ignore soft skills. These skills are crucial in creating successful virtual teams to accomplish project goals.

Virtual team leaders who encourage positive interactions can mitigate potential harmful conflicts (Shahzad et al., 2019). Leaders should build a relationship with their virtual team members, fostering trust and support (Donati et al., 2019). Trust built into a virtual team encourages collaboration and avoids conflict to improve virtual team performance (Tabassi et al., 2019). High-performing virtual teams depend on trust, especially without face-to-face interaction (Lippert & Dulewicz, 2018).

Positive interactions create positive collective well-being, which encourages moral support of ideas, building, sharing, and being mindful of each participant (García-Buades et al., 2019; Shahzad et al., 2019). Collective well-being leads to improved job satisfaction and job performance between virtual team members contributing to virtual

team performance (García-Buades et al., 2019). Therefore, leaders are vital for team performance to achieve a virtual team's project goals (Norhanim & Nas'aiman, 2019).

Team members working together towards achieving goals is fundamental for organizational success. According to Büyükbaş and Harmancı (2020), team members need to have positive relationships with each other because of positive relationships influence employee performance. Leaders must ensure collaboration among team members is encouraged to form trust, leading to an increase in performance (Büyükbaş & Harmancı, 2020). An increase in performance can include increasing productivity and achieving project goals, creating a competitive advantage. Increasing cooperation amongst team members is vital for achieving project goals. Virtual leaders must consider the importance of scheduling time for encouraging positive team member exchanges to help achieve project goals (Whillans et al., 2021).

Virtual team leaders play a vital role in their teams' productivity. Leaders must communicate with their virtual team members while understanding the importance of using efficient information communication tools to accomplish team goals (Okechuku & Nebo, 2020). Suitable technology devices connecting leaders and their virtual team members can improve an organization's productivity, advancing an organization creating a competitive advantage (Okechuku & Nebo, 2020). Virtual team members must also feel respected and comfortable with their leader to gain trust and be motivated to accomplish goals (Okechuku & Nebo, 2020). Therefore, leaders who have proper communication skills using technology can motivate virtual team members to achieve goals.

Leaders of virtual teams can encourage innovative projects for their organization to create a competitive advantage. The challenge for leaders is understanding the skill mix of their virtual team members to form the right group to accomplish those goals through technology (Hadjielias et al., 2021). Virtual team leaders must understand the technology used, provide appropriate training, and understand the group's different personalities and problem-solving abilities to encourage knowledge sharing and trust (Hadjielias et al., 2021).

Virtual team leaders' importance has shown true during the covid-19 pandemic, especially with effective communication and trust. The Garro-Abarca et al., 2021 study above shows the benefits of virtual team leadership, especially if they have already developed a positive relationship. Leading a virtual team takes a different approach than a traditional team. The leader needs to use common sense, keep in mind personal balance, and influence people through logic in a virtual team, then provide their members with guidelines (Aharouay, 2021).

Leaders with a complementary skill set of a dynamic virtual team can encourage innovation and streamline processes using technology to create a competitive advantage for organizations (Hadjielias et al., 2021). Organizations that have a competitive advantage can survive competitors or potentially challenging circumstances that are unavoidable. Having a virtual team motivated to be innovative due to positive team dynamics created by their leader can accomplish goals for an organization and provide an organization competitive advantage.

Challenging times can present virtual teams with difficult situations, primarily because of the lack of face-to-face interaction and communication tools. According to Newman and Ford (2021), there are five steps to leading a virtual team successfully, especially during challenging situations. The steps include leaders establishing clear expectations, encouraging shared leadership amongst team members, having better communication tools and techniques for their virtual employees, maintaining a culture of trust, and ensuring their virtual employee's alignment with the organization's cultural value. Implementing the five steps helps leaders encourage their virtual team's success despite the circumstances (Newman & Ford, 2021). Although a virtual team can succeed without its leader implementing the five steps, challenging times can create misalignment. Therefore, having clear guidelines inspires alignment between members and the organization to encourage success despite the difficult situation.

Herzberg's two factor theory (Herzberg et al., 1959) is in alignment with motivational communication strategies to motivate virtual teams to accomplish goals. Addressing basic needs considered hygiene factors can prevent job dissatisfaction. Leaders can use motivation factors to inspire a sense of belonging to the organization and motivate virtual team members to achieve project goals. By decreasing job dissatisfaction addressing hygiene factors in virtual teams, including motivating factors as a communication strategy may encourage team members' motivation to accomplish the team's goals. This, in turn, contributes to an organization achieving a competitive advantage.

Trust

The lack of face-to-face interaction in a virtual team can necessitate motivation to achieve goals. For some members, external motivation can come from a leader within an organization. The trust gained from a leader can be a factor that motivates an employee to achieve goals. Trust between individuals in a virtual setting is challenging because of the potential lack of interaction and nonverbal cues conducted in a traditional environment (Owens & Deepak, 2018). The trust between each member can be the main factor motivating individuals to achieve project goals.

Trust created within a virtual setting requires effort and different avenues for building it. Trust can be encouraged by using various tools such as technology, whiteboards, or video calls for collaboration (Williams et al., 2019). Some organizations create a page or share pictures through a profile, like some social media pages, to encourage employee relationships (Martinelli Watanuki & de Oliveira Moraes, 2019). Other organizations create opportunities for employees to participate in group activities to grow relationships and have fun while working together on a goal (Petter et al., 2020). According to Petter et al. (2020), group activities create a bond, trust, and increased collaboration while working on a shared goal. An increase in trust may improve the organization's positive outcomes and encourage virtual team members to collaborate in achieving project goals.

During the beginning phase of virtual team projects, relationship building encourages increased trust among virtual team members and leaders (Morrison-Smith & Ruiz, 2020). The absence of body language and visual cues or gestures tends to delay

team members in developing trust (Morrison-Smith & Ruiz, 2020). Choosing the right communication tool to build the team's relationship, especially in the beginning, is essential (Varhelahti & Turnquist, 2021). Therefore, trust can be encouraged by using various tools such as technology, whiteboards, or video calls for collaboration (Williams et al., 2019).

Although playing games and using different technology tools for communication can help build relationships, it is also essential for virtual team leaders to exhibit emotional intelligence (Khosravi et al., 2020). The lack of non-visual cues and face-to-face interaction that can come in a virtual environment can create misunderstanding. Ensuring emotional intelligence through communication with virtual team members can foster trust and increased communication. Teams with increased trust tend to work better together, creating successful results (Khosravi et al., 2020). Even when receiving negative feedback, teams with increased trust can better tolerate negative feedback than those without trust (Jaakson et al., 2019).

Trust amongst team members can foster creativity and encourage knowledge sharing (Petter et al., 2020). It is essential to gain trust early within a project or even during onboarding to ensure success amongst the team (Ferrell & Kline, 2018). Positive interactions amongst members can foster trust amongst individuals (Havakhor & Sabherwal, 2018). Virtual teams need to comprise the right people because of the trust required to ensure success within an organization (Ergulec, 2019). Not having the right people on team, including a virtual team, can create negative interactions, decrease trust, and lead to unsuccessful outcomes. Trust encourages knowledge sharing and

collaboration, which leads to working towards a goal and achieving success (Havakhor & Sabherwal, 2018; Owens & Deepak, 2018). Therefore, understanding the importance of trust within a virtual environment is essential for achieving project goals.

Motivation

Some organizations try to motivate their employees to stay with the company and achieve organizational goals. Organizations may use mediating effects for increasing and maintaining motivation by creating meetings on a daily or weekly basis for employees to discuss any concerns (Shah, 2021). Other organizations use benefit plans, training programs, career plans, social actions, leisure activities, and union rights (Aharouay, 2021). Individual motivation is dependent on different factors for each person.

Each person can be motivated based on various aspects of their life. Instead of companies trying to inspire the whole team as one unit, they should shift to a tailored motivation approach for each employee to encourage successful virtual team performance (Aharouay, 2021). Personalized motivation can be challenging and time-consuming; therefore, a generalized system of motivating the team is more manageable and cost-effective for organizations. The downside of a team motivation approach is that not everyone is motivated by the same motion.

Companies may incentivize personal training and individual performance through a point system to encourage motivation and decrease employee turnover (Aharouay, 2021). This intern improves commitment to the company and improves virtual team performance (Aharouay, 2021). According to Antoni et al. (2017), a reward system for motivating employees may be sufficient if distributed evenly based on performance. The

negatives of having a reward system may create unhealthy competition between employees (Antoni et al., 2017). Motivation based on company incentives may improve employee performance and lead to positive organizational outcomes, but it may also lead to unintended consequences such as an unhealthy company culture.

Haines (2021) study used college student participants to assess motivation with virtual team members. The results indicated virtual team member motivation occurs when team members have a social awareness of each other's activities. Virtual team member awareness encourages an increase in personal effort and team loyalty (Haines, 2021). This study may positively affect motivation in virtual teams despite its limitation of only using college students. A balance is needed between encouraging motivation in virtual team members and preventing negative competition if team members start comparing the number of activities completed amongst each other.

A company's culture also encourages employees to achieve the organization's project goals. A positive culture can improve employee motivation and achieve both a team's project and the broader organization's objectives (Lidya Lolowang et al., 2019). Leadership is vital for setting the corporate culture for creating employee work motivation to achieve project goals. When leadership understands how each person prefers to be recognized on the team, this can encourage individual motivation leading to improved team performance (Aharouay, 2021). This in turn influences organizational performance (Lidya Lolowang et al., 2019).

Virtual Team Performance

Virtual team leaders play a role in virtual team performance. A virtual team leader must motivate and establish processes for the team to follow to achieve success (Aharouay, 2021). Virtual team leaders must be proficient in virtual activities such as communication, socialization, and collaboration to lead a virtual team successfully (Aharouay, 2021). Without understanding the process of how to lead a virtual team to improve virtual team performance, the objective may be difficult.

Not only are leaders necessary for virtual team performance, but so are employees. Ensuring employees are well trained and prepared for their position reduces stress, improves productivity, and contribution to organizational goals without employees and leaders feeling they had wasted their time (Nadeema et al., 2020). Employees having autonomy and competence in making appropriate decisions also improves virtual performance (Aharouay, 2021). Virtual team members usually have more autonomy than they would not have if they were in the office (Aharouay, 2021). Autonomy gives a sense of ownership to the task at hand and the company. This creates a burden to the employee through self-regulation and extra effort (Contreras et al., 2020). The increase in autonomy encourages virtual individual performance, which enhances team performance (Aharouay, 2021; Contreras et al., 2020). With proper training and having the right employee for the right job, organizations can create a competitive advantage.

As globalization expands, virtual teams continue to grow with new communication technology (Tavoletti et al., 2019). The flexibility provided by being in a virtual team creates opportunities to work on different projects and contributes to

employee job satisfaction and improved performance (Avdiaj & Ziberi, 2019; Contreras et al., 2020; Lumseyfai et al., 2019). The flexibility of a virtual team allows organizations to work with employees around the globe, which allows organizations to respect the regulatory issues of other countries (Aharouay, 2021).

Organizations are using virtual teams more because of the decreased cost, decreased carbon emission, reduction of employee absenteeism, and increase in productivity (Dumitrașcu-Băldău & Dumitrașcu, 2019). Teaming up with different organizations to work on a project with a shared purpose is beneficial for all parties involved (Barbosa et al., 2019). Recognition of virtual team performance by leaders can motivate virtual team employees leading to improved satisfaction and performance (Aharouay, 2021; Contreras et al., 2020). According to Herzberg's two-factor theory (Herzberg et al., 1959), minimizing job dissatisfaction is necessary for encouraging employees through motivation factors. Virtual team performance is essential for accomplishing project goals. Without employee job satisfaction and job performance, virtual team performance will be challenging.

Virtual team performance challenges. Virtual team performance requires various aspects for consideration in comparison to a traditional team. Team members must consider different time zones and ensure precise coordination for project performance (Barbosa et al., 2019). Proper communication tools used for the virtual team project's goals are also necessary. If technology is not working correctly or challenging during its use, team members will have difficulty accomplishing the project's objectives (Norhanim

& Nas'aiman, 2019). Ensuring proper resources are working functionally and effectively is an essential aspect of virtual team performance (Lumseyfai et al., 2019).

Using technology tools that incorporate visual feedback can guide virtual team members to work towards the goal instead of constantly being supervised (Glikson et al., 2019). Virtual misunderstanding or lack of immediate feedback can cause unwanted conflict creating virtual team performance challenges (Turesky et al., 2020). Based on Turesky et al. (2020), having virtual team members resolve the conflict themselves is effective. Virtual team leaders can help facilitate a resolution when a consensus cannot be established.

Virtual team performance is harder to manage, especially with a lack of face-to-face interaction. Negative behaviors like free-riding and social loafing can challenge virtual team performance during project completion because these aspects are more difficult to identify (Tavoletti et al., 2019). The behaviors manifest such as not participating in projects as much as the other team members when working on a project. This makes virtual team performance challenges harder to identify and mitigate.

Leaders can use different techniques to address virtual team performance challenges. Organizations may use peer evaluations to assess individual performance or perceived own performance, but peer evaluations do not improve team performance (Tavoletti et al., 2019). Peer evaluations create a perceived effort of participation but do not address the team performance as a whole (Tavoletti et al., 2019). Clear guidance, a mandatory number of interactions, and careful planning throughout the project are essential for team performance success (Barbosa et al., 2019). Organizations should

consider using a team performance assessment that identifies the team's motivation and productivity instead of individual peer performance to accomplish virtual team project goals (Tavoletti et al., 2019).

Virtual team performance challenges can be alleviated by assigning tasks and projects based on individual competencies to encourage good team performance (Jahagirdar & Bankar, 2020). According to Turesky et al. (2020), conflict management training can mitigate virtual team performance challenges. Transformational leadership was more effective than transactional leadership in virtual teams, especially in resolving conflict (Turesky et al., 2020). Different methodology approaches with active listening and creative problem solving used with transformational leadership tend to solve disputes and improve virtual team performance (Turesky et al., 2020).

Transition

In Section 1, I presented the background of communication and motivation strategies for virtual team members to achieve project goals, the problem and purpose statement, and the study's nature. I explained the conceptual framework, assumptions, limitations, delimitations, and significance of the study. I included a literature review on virtual teams, communication, and leadership communication with virtual teams in the literature review.

In Section 2, I will explain my role as the researcher, ethics, and the use of the Belmont Report protocol. I will describe how I will mitigate bias. The research method, research design, and sampling population will be described. I will also explain the participant eligibility, sample protocol, and the strategies for establishing working

relationships with participants in this section. I will share data collection instruments, techniques, data analysis, reliability, and validity in this section.

Section 3 will include presenting the findings, application to professional practice, and implications to social change. I will have recommendations for further research and reflections on the study. The study would then conclude with the conclusion statement.

Section 2: The Project

In Section 2, I discuss my role as the researcher, the participants, research method, and design. I explain the population and sampling to ensure I am conducting ethical research. I explain the data collection instruments, data collection techniques, and the advantages and disadvantages of the data collection technique. I concluded Section 2 with data organization techniques and data analysis to ensure the reliability and validity of this study.

Purpose Statement

This qualitative multiple case study explores communication strategies leaders use to motivate virtual team members to achieve project goals. This study's target population is five virtual team leaders in the northeastern United States, who have implemented successful communication strategies that motivate their virtual team members to achieve a given project's goals. Motivated team members can influence positive social change initiatives within their communities, creating job satisfaction and improving performance (Andrade & Westover, 2020). Positive social change implications include the potential for achieving more significant results while solving problems that may benefit communities.

Role of the Researcher

According to Yin (2018), the researcher's role in conducting a case study is to collect data within the participant's natural environment. The researcher is the instrument that contains the information for the case (Alpi & Evans, 2019). The data I collected as the qualitative researcher is presented in a clear, cohesive, and unbiased manner

(O'Sullivan & Jefferson, 2020; Roger et al., 2018). I collected the data for this study by interviewing my participants, then collecting, analyzing, and presenting the findings. I also used documents from the participant's organization as a secondary source.

As the researcher, I am familiar with the topic as I currently work within a virtual team. I am familiar with the northeastern United States because I live within the region. I did not recruit participants that I have a professional or personal relationship. I prevented any potential bias by not recruiting participants that may influence my study results (Galdas, 2017).

According to Dragga and Voss (2020), ethical research involves honesty accuracy and objectivity with a social value potential. The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research created the Belmont report to ensure safe human ethical interactions, including respect for persons, beneficence, and justice (Cragoe, 2019; National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979). I upheld a moral standard in following the Belmont report protocol in research to ensure my participants' safety while reporting the findings honestly and accurately.

Bias refers to when a person's own opinion can potentially influence the study's results (Galdas, 2017). Mitigating bias is crucial when conducting a study. It is essential to ensure responsibility by being honest, maintaining professionalism, and having critical colleagues bouncing alternative data collection ideas to minimize bias (Yin, 2018). Researcher transparency and reflexivity within the study can mitigate bias (Mackieson et al., 2019). I avoided viewing data from a personal perspective by being transparent and

maintained reflexivity within the research. I did not include my influence or probe my participants to influence the results of the study. I kept a journal to reflect on the research process to maintain reflexivity and took notes as soon as interviews were completed.

Interviews are one of the main components of qualitative research. Interview protocols provide quality and consistency in the study (Braaten et al., 2020). Interviews need guidance to make the conversation fluid and achieve in-depth conversation (Yin, 2018). I used an interview protocol to provide fluid conversations with the interviewee and maintain consistency with my participants.

Participants

The eligibility criteria for study participants in research studies are participants who hold essential characteristics to answer the research questions (Patino & Ferreira, 2018). The eligibility criteria for participants of this study are that they must (a) be the leader of a virtual team, (b) have previously implemented communication strategies to motivate virtual team members, and (c) have achieved project goals within the past year. The following research question guided the study: What communication strategies do leaders use to motivate their virtual team members to achieve each project's goals? The study participants participated in a voluntary dialogue guided by the researcher to answer the research question (Yin, 2018). Leaders who participated in this study may encourage other leaders to reach their goals. Leaders who use communication strategies to motivate their virtual teams can improve team performance (Newman & Ford, 2021).

There are various strategies for gaining access to participants. I used social media platforms, such as LinkedIn and Facebook to search for participants. I also used snowball

sampling by asking participants to refer friends or colleagues who want to participate in my research study. I posted the participant criteria during the recruiting process. All those who meet the criteria were considered. Participants indicated and acknowledged they have succeeded in achieving project goals by motivating their team members.

Establishing a working relationship with study participants is essential for maintaining the participant's motivation to be in the research study (Khatamian Far, 2018). Meeting with the participants face-to-face is a strategy that can develop a relationship but may not be feasible at all times. Therefore, establishing a plan by gathering information, understanding the participant's limitations and benefits, documenting clear expectations and understanding of the study, and having continuous clear communication can help develop positive relationships (Demby et al., 2020).

The inclusion and exclusion criteria of the participants are essential for the researcher in answering the research question. Being aware of the characteristics needed for participating in the study is vital for preventing bias (Patino & Ferreira, 2018). Choosing the wrong participant characteristics may avoid alignment with the overarching research question and affect the study results (Patino & Ferreira, 2018).

Research Method and Design

Research Method

The three research methods are qualitative, quantitative, and mixed (Hendren et al., 2018). Researchers who use a qualitative method gather information to understand different perspectives for comprehending an issue (Johnson et al., 2020). Qualitative

researchers use semi-structured interview questions to answer the research question (Braaten et al., 2020). Qualitative researchers focus on how and why using opened-ended questions for the interviewee to explain the questions (Yin, 2018). A qualitative research method is the best method for this study to understand the ideal communication strategy for motivating virtual team members to achieve project goals.

Quantitative researchers show relationships between statistical data (Yin, 2018). According to Baskarada and Koronios (2018), quantitative researchers use a positivistic approach, whereas qualitative researchers use an interpretive approach. Yin (2018) refers to quantitative researchers as realists and qualitative researchers as relativist or interpretivist. Quantitative researchers do not incorporate the experiences of those tested; therefore, the research may not give an in-depth view of the situation presented (Rahman, 2017). I did not choose a quantitative research method for this study because I wanted the interviewee to present their interpretation experience to understand how communication strategies can motivate virtual team members to achieve project goals.

A researcher who uses a mixed-method approach uses both qualitative and quantitative tactics (Baskarada & Koronios, 2018). Researchers collect and interpret data through qualitative and quantitative methods such as semi-structured interviews and questionaries (Soleimani, 2020). Since I did not use a quantitative method of collecting data and interpreting data within my study, a mixed-method approach was not suitable.

Research Design

The four research designs considered for this study are (a) ethnographic, (b) narrative, (c) phenomenological, and (d) case study. An ethnographic design requires

researchers to observe participants in their data collection environment (Celikoglu et al., 2020). Researchers using an ethnographic design have participants share their perspectives reflecting on emotion and present and past experiences (Helgason & Smyth, 2020). An ethnographic design would not suit my study because I am not asking participants to share experiences based on emotion but successful communication strategies.

A narrative design is reliant on participant stories and experiences (Celikoglu et al., 2020). A narrative design allows for a copious amount of data collection from participants. The information is then compiled into themes or subcategories to answer the research question (Celikoglu et al., 2020). This design's downfall is the ability to make sense of the information retrieved to answer the research question (Celikoglu et al., 2020). A narrative design was not suitable for this study because using a participant's life story would not answer the query of communication strategies used to motivate virtual team members.

A researcher using a phenomenological design gathers information from participant experiences and how the experience impacted their lives (Torcivia Prusko et al., 2020). In a phenomenological design, the researcher's aim is to understand a phenomenon through the participant's experience (Torcivia Prusko et al., 2020). A phenomenological design is not optimal for this study because communication strategies that can motivate virtual team members were explored, not an experience that impacted a person's life.

A researcher who uses a case study method explores the why and how of the situation (Nilmanat & Kurniawan, 2021). Researchers using a case study design use different methods to collect data (Alpi & Evans, 2019; Nilmanat & Kurniawan, 2021). Multiple methods to collect data can help accomplish data saturation until no new information gathers for the case study (Kline, 2017). I chose a case study method to gain better insight by collecting data through different data saturation approaches and understanding communication strategies to motivate virtual team members to accomplish goals. A case study design is the best method to understand better this research phenomenon (Nilmanat & Kurniawan, 2021).

Population and Sampling

According to Yin (2018), a multiple case study requires two or more cases. Yin (2018) shares the importance of replication when choosing sample size. Choosing two to three cases for replication is sufficient, but additional replications are valuable for a higher degree of certainty (Yin, 2018). Wade (2019) used a sample size of five virtual bank leaders who implemented successful communication strategies to motivate virtual team members. Guerra-Brown (2017) also had a sample size of five participants who shared their strategies on increasing virtual team productivity. My multiple case research study has a similar topic as Wade and Guerra-Brown; therefore, I selected five participants as a sample size. Data saturation will be the ultimate guide for my population size. When no further new content or information is collected, I will reach data saturation (Saunders et al., 2017). Reaching data saturation will guide the population size of the study, as stated by Saunders et al. (2017).

Social media sites can be a great way to gather research (Reagan et al., 2019). I used social media sites such as LinkedIn and Facebook to acquire research candidates. LinkedIn is a professional network that connects different professionals to advance careers, find job opportunities, and strengthen professional relationships. Facebook is an internet-based site that allows friends, colleagues, and family members to connect. I searched for research candidates by joining virtual team leadership groups on Facebook and LinkedIn. Facebook groups joined but was not limited to the following; Next Normal Leadership: Managing Virtual Teams, Mental Health & Change; Leadership Institute; Personal Development, Team Building, Team Success, Team Growth & Leadership; and eCommerce by the Leaders. The following LinkedIn groups I joined but was not limited to are Lean Six Sigma Leadership; Virtual Leadership and Team Effectiveness; Team Science and Collaboration- Virtual Community; Coaching Essentials for HR, OD and Leadership Development Professionals. Due to the unpredictable nature of social media, name changes and other groups beneficial in population will be included.

I requested the group leader to accept me into their group. I read profiles of the members within those two social media platforms and sent the members messages via the social media site to ensure eligibility of the potential candidate and voluntary participation within the study is allowed. I also posted the criteria in the LinkedIn and Facebook groups clearly outlined for recruiting participants. I also asked potential participants to ask their friends, family, and colleagues if they know eligible candidates who would like to participate in the study using a snowball sampling strategy. If anyone

who meets the criteria is willing to participate, I asked them to message me. I used snowball sampling to reach saturation.

The eligibility criteria for participants of this study are they must (a) be a leader of a virtual team, (b) have previously implemented communication strategies to motivate virtual team members, and (c) have achieved project goals within the past year.

Qualitative researchers who use purpose sampling choose participants that meet the criteria to answer the research question (Johnson et al., 2020). Purposeful and snowball sampling are the best approaches for my study to answer the research question (Johnson et al., 2020).

Snowball sampling is when participants refer other participants, and the referrals continue from one person to another (Johnson et al., 2020; Kline, 2017). Purposeful sampling and snowball sampling provide the researcher with voluntary participants that meet the need to answer the research question. Purposeful and snowball sampling is the best method for this research because participants are chosen based on criteria. The disadvantage of these methods is that data collection can be a gradual process that continues until reaching data saturation (Naderifar et al., 2017). To overcome this disadvantage, I shared the study criteria with as many people as possible to seek participants who can meet the study criteria.

To answer the research question, collecting data from participants until I cannot collect any new data is vital for data saturation (Johnson et al., 2020; Kline, 2017). Data saturation will be determined when no new data is collected and no new themes are

evident for coding to transpire (Johnson et al., 2020). Although data saturation can take time, it is important for the quality and validity of the study.

According to Braaten et al. (2020), a qualitative researcher's critical method of collecting data is conducting interviews. Conducting interviews through direct interactions via face-to-face or the telephone are ways to collect data within the participants setting (Rahman, 2017). I used information and communication technology to mitigate face-to-face interaction for compliance with the Center for Disease Control and Prevention due to Covid-19. Providing the participant with the background of the study, informed consent, and confidentiality was explained before the interview to ensure a comfortable interview setting for data collection (Johnson et al., 2020).

Ethical Research

Collecting research should be ethical and not cause harm to anyone who participates or wants to participate (Johnson et al., 2020). Before taking part in the study, I provided participants with informed consent stating the study's nature, who is conducting the research, and the study results when completed (Rahman, 2017). Included within the informed consent provided to the participant was a list of all risks and benefits that may affect them, their responsibilities, and the right to withdrawal from the study if they wish to do so (De Sutter et al., 2020). I did not provide incentives for participants to participate in this study.

According to the United States Department of Health and Human Services, the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research created the Belmont report to secure the participants' ethical

protection. Keeping the Belmont report in mind during this study, participants will stay anonymous, minimize risk, maximize the study's benefits, and ensure fairness throughout the research process. Participants must be willing to participate voluntarily and are aware they can withdraw at any time.

Informed consent and withdrawal from the study will be located in Appendices A and the Table of Contents. To ensure confidentiality, I coded participants' names as P1, P2, P3, P4, and P5 to remove personal identifiers from the study. I coded their employing companies as C1, C2, C3, C4, and C5 to avoid publishing any corporate names within the study. I stored the data securely for five years to protect the confidentiality of the participants. After five years, I will discard the information by deleting all digital records and shredding all papers related to the study. The Walden University IRB approval number for this research study is 02-17-22-0973692

Data Collection Instruments

Qualitative researchers are the instruments that collect data for their research (Alpi & Evans, 2019). As the qualitative researcher, I am the primary data collector. I collected the data through semi-structured interviews. I also gathered public documents from the participant's organization as a secondary source. According to Alpi and Evans (2019), one of the most important data collection methods is the interview. Semi-structured interviews are usually open-ended questions, and the topic of interest is identified (Busetto et al., 2020). Face-to-face communication technology and telephone techniques of collecting data can elicit feelings, perceptions, and views throughout the interview and create an interactive approach (Rahman, 2017). The gold standard for

conducting a qualitative study is face-to-face interviews (Krouwel et al., 2019).

According to Krouwel et al. (2019), video calls are valid for qualitative interviews due to circumstances, cost savings, and time. Video conferencing was the primary method of collecting the data.

A transcript of the interview was provided to the participant after the interview transcription was completed, if requested. Member checking was conducted after the transcript review to ensure validity and reliability. During the member checking session, I reviewed a summary of the transcript to ensure the interpretation of the transcript results was a complete representation of the interviewee's view and asked if the interviewee would like to add anything to clarify or to elaborate (Busetto et al., 2020). I followed the interview protocol in Appendix A.

Data Collection Technique

Data can be collected using various ways, such as using in-person, email, telephone, or video recording. In certain situations, video conferencing is sufficient for interviews to save time and expense (Krouwel et al., 2019). I used video conferencing to conduct the interviews. I followed the interview protocol in Appendix A.

Interview Preparation

I posted an ad on LinkedIn and sent messages to eligible candidates on the social media site to ensure they meet criteria. After that I sent a consent form to the partcipants to sign. I also used snowball sampling to gain participants. I had the leaders' sign consent for participation and reminded them that they can withdraw at any time if they feel the

need. After I received the signed consent from the virtual team leaders, I coordinated a time to schedule a virtual face-to-face meeting.

The Interview

Before beginning the interview, I thanked the participants for taking the time to partake in the study. I explained my role as a researcher, and I went over the informed consent. I informed the participants of the need to record the session for transcription purposes. If requested, I provided the transcript to the participants to review and maintained confidentiality for both the participant and the company by using code names. I also asked the participant to share public company documents used to motivate virtual team members to accomplish goals such as employee engagement and leadership surveys.

After the interview, I thanked the participants and remind them of a 30–45-minute member checking session. Member checking allowed the participants to verify the accuracy of the interpretation of the interview responses.

Document Review

I reviewed public documents applicable to communication strategies leaders use to motivate virtual team members to accomplish team goals and engagement surveys sent by the participant. I reviewed documents such as the mission statement and vision of the organization to better understand the participants' explanation of the organizational goal. I used document analysis to review the documents collected from the organization and participants. Reviewing documents collected from different companies is another form of data collection for observing results (Busetto

et al., 2020). This supports methodological triangulation in using different methods for data collection to explore the same phenomenon (Azulai, 2021; Feng et al., 2021). Collecting information from multiple sources to collaborate on the same findings supports construct validity of the study through triangulation (Yin, 2018).

Advantages and Disadvantages of Data Collection Techniques

There can be many advantages and disadvantages of data collection techniques with a qualitative research methodology. The benefits of the data collection technique using semi-structured interviews are getting opinions and subjective experiences due to the interview's interactive nature (Busetto et al., 2020). Documents for data collection are specific and can be reviewed repeatedly, which is also an advantage (Yin, 2018). During data collection, a disadvantage of written forms is creating bias from the researcher, measuring what is already known or expected. In contrast, a semi-structured interview helps mitigate bias from the researcher and encourages an interactive approach (Busetto et al., 2020).

A qualitative research methodology gives the researcher flexibility for data collection techniques (Busetto et al., 2020). Having the ability to collect various sources of information to understand the phenomenon is an advantage to data collection techniques using a qualitative research methodology (Yin, 2018). Although there is flexibility with qualitative research data collection, it takes longer to complete; this poses a disadvantage (Busetto et al., 2020). Another disadvantage of data collection for qualitative research is the smaller sample size making the results harder to generalize (Rahman, 2017). Smaller sample sizes can create rich

data that would otherwise be harder to collect using a different technique (Busetto et al., 2020).

I used member checking for the data interpretation from the interview.

Member checking is a technique that allows participants to review and add feedback if needed to the study based on the interpretation of the responses (Busetto et al., 2020). Member checking gives the study credibility (Stahl & King, 2020).

Data Organization Technique

I kept track of data by taking notes on each participant, company, and theme that emerged from the study. I used code names to protect the participant and the company used within the research. Taking notes from interviews, observation, and documents received and putting them in categories or major topics saved in an organized fashion makes retrieving the information easier (Yin, 2018). I kept each participant's file using password-protected documents in Microsoft Word, Excel, and Nvivo.

Ensuring safekeeping is essential for maintaining the confidentiality of all participants. I used a USB drive to keep all documents in one area and upload them to a password-protected personal cloud that I can access separately. I stored the (a) informed consent letter, (b) interview transcripts, (c) recordings for the interviews, (d) company documents, and (e) handwritten notes from the transcript of the interviews. I will store all data securely for five years.

Data Analysis

Collecting material from various sources to identify common or uncommon findings creates data triangulation for the data analysis process (Yin, 2018). The data

collected for the data analysis process was joined and reviewed. Joining and reviewing data collection for data analysis helps minimize bias and errors using triangulation (Johnson et al., 2020). Collecting data from different sources builds the construct validity of the case study (Yin, 2018).

Ensuring rigor in a qualitative research study is essential for maintaining the study's quality and trustfulness (Johnson et al., 2020). I transcribed the recordings collected. I then uploaded the transcription into the analysis tool, Nvivo. I combined all data from the interview and documents collected from each organization.

Compiling data into one area will make the information easier to access. The collected data will make the information simpler to put together into different similarities or differences. Data clustering helps sort the information (Kumar et al., 2020). Once the information is coded and clustered into similarities, themes can emerge. Computerassisted tools used for coding can be a great assistant and reliable (Yin, 2018). Nvivo was used to assist with coding the information and identifying themes from the research. According to Busetto et al. (2020, p.4), coding is a descriptive theory of behavior patterns under investigation. Inductive reasoning is used for qualitative research by not testing a theory but using different methods to understand a phenomenon (Pratt et al., 2020).

I focused on key themes that emerged from communication strategies leaders used to motivate virtual team members. I then related the themes based on the literature and Herzberg's two-factor theory (Herzberg et al., 1959). According to Ju (2021), managers can reference Herzberg's two-factor theory to get ideas on motivating virtual

team members to accomplish goals. The findings that transpired guided my reflection on the literature regarding motivational communication strategies for motivating virtual team members to accomplish goals.

Reliability and Validity

Reliability

Guba and Lincoln (1981) created a qualitative trustworthiness criterion corresponding to a quantitative researcher's validation criteria (Huttunen & Kakkori, 2020; Moon et al., 2016). Reliability is comparable to dependability for qualitative research (Huttunen & Kakkori, 2020; Moon et al., 2016; Rose & Johnson, 2020). For qualitative research to be reliable, it must be consistent and clear for the research method to be dependable (Moon et al., 2016; Rose & Johnson, 2020).

Qualitative research dependability includes the researcher providing the reader with truthful and inclusive records of the research process (Moon et al., 2016; Nilmanat & Kurniawan, 2021). Ensuring the research's dependability is when the study includes detail for the research to be repeated (Johnson et al., 2020; Moon et al., 2016; Rose & Johnson, 2020). Asking members who participated in the study to read the interview transcript and performing member checking is essential for the study's dependability (Nilmanat & Kurniawan, 2021). Member checking sessions to review interview response interpretations enhances the quality of the research study (Busetto et al., 2020). I incorporated member checking of data interpretation to ensure the reliability of the study.

Validity

Validity supports the accuracy of the research (Rose & Johnson, 2020). In social

sciences, validity is credibility, confirmability, and transformability (Huttunen & Kakkori, 2020; Moon et al., 2016). The validity of a study requires credibility. Credibility entails having an honest representation of the data (Johnson et al., 2020). I disclosed any differences or similarities found within the study. One way to address credibility is through member checking. Asking participants to read the data interpretation through member checking is vital to ensure research credibility (Nilmanat & Kurniawan, 2021; Rose & Johnson, 2020). Triangulation can also ensure credibility (Moon et al., 2016). Triangulation is collecting data from multiple sources and coming to the same data and conclusion (Johnson et al., 2020; Nilmanat & Kurniawan, 2021; Rose & Johnson, 2020).

I collected the data and checked for triangulation to ensure the credibility and validity of the study. I also used member checking to address credibility and validity by having the participants review the interpretation of the results. According to Johnson et al. (2020), disclosing all information within the research ensures the study's credibility. If any controversial or competing themes emerge within the study, it will be my duty to disclose all information to ensure the study's credibility.

Transferability refers to the study's details, such as location, size of the study, the timeframe of when the study was collected, and its ability to be applied to different areas or situations (Johnson et al., 2020; Moon et al., 2016; Nilmanat & Kurniawan, 2021). I shared aspects of where the study took place, the size of the research, and the study's timeframe for the reader to determine if the details can be applicable in other settings. Having an increase in transferability provides the study with increased validity (Johnson et al., 2020).

Confirmability is the confirmation of data accuracy through different approaches such as peer review, triangulation, and reflexivity (Nilmanat & Kurniawan, 2021). The data interpreted by the participants and without bias by the researcher ensure confirmability (Johnson et al., 2020; Moon et al., 2016). The use of member checking, triangulation, and peer review will also address the study's confirmability (Johnson et al., 2020). I presented all results to the participants for review to prevent bias interpretation as the researcher and ensured the study result's confirmability. I also used triangulation of the data and peer review from the university review panel.

I continued to collect data until the research contained no new themes or information. Collecting data until no further information is collected or gained through data saturation is a common standard of rigor in qualitative research studies (Johnson et al., 2020).

Transition and Summary

In Section 2, I explained my role as the researcher, the process of recruiting eligible virtual team leaders as participants within this study, and the justification for using a qualitative method with a case study design. I explained the interview process that participants would go through. I also explained the member checking process that took place after I completed the interviews and the data analysis.

Section 3 will present the research findings, discuss the applications for business improvement, and the implications for social change. I will include reflections from my research and provided a concluding statement to finalize Section 3.

Section 3: Application to Professional Practice and Implications for Change Introduction

The purpose of this qualitative multiple case study was to explore communication strategies leaders use to motivate virtual team members to achieve project goals. The data came from eight virtual team leader interviews in the northeastern United States. The findings showed methods leaders used to motivate their virtual team members to achieve project goals.

Presentation of the Findings

I developed eight interview questions and used video conferencing and telephone calls to conduct eight semi-structured interviews. I wanted to understand better the communication strategies virtual team leaders use for motiving virtual team members to accomplish goals. I collected data from public company documents and the interviews. I created a summary of the interview transcripts and conducted member checking to obtain validation of my interpretation of their interview responses. I collected data until reaching data saturation to ensure no new themes or patterns emerged. I reached data saturation at eight paticipants.

For confidential purposes, I used P1, P2, P3, P4, P5, P6, P7, and P8 to identify each participant and C1, C2, C3, C4, C5, C6, C7, and C8 to identify each company respectfully. I reviewed the data collected from participants and their company websites. I used Nvivo software to sort, code, and analyze the data. Three themes emerged from the

research: (a) multiple communication tools, (b) frequency of communication, and (c) feedback communication.

All participants mentioned they communicated with their virtual team members using at least one form of communication tool. This confirms that versatile communication tools improve team performance by providing different ways to work on a project goal, as Parlamis & Dibble (2019) stated. Table 1 displays the responses from the interview participants sharing their current communication strategies. Figure 1 is a graph of the responses showing the participants using multiple communication tools as a communication strategy.

Emergent Theme 1: Multiple Communication Tools

 Table 1

 Participant's responses for current communication strategies

Current Communication Strategies	Frequency	Percentage
Participants	8	
Multiple forms of communication	7	88%
Email	3	38%
Face to Face in person	3	38%
Group communication	6	75%
Telephone	3	38%
Video	4	50%
Written	8	100%

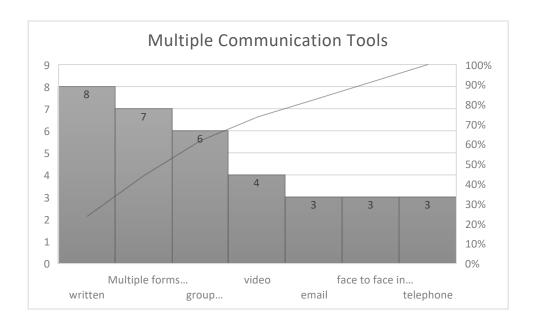


Figure 1

Multiple Communication Tools

The participants reported they had used multiple forms of communication to motivate their virtual team members, as P3 shared below.

"We currently use various virtual communication platforms with our team members, including zoom calls, Microsoft Teams, regular 1-1 telephone calls, emails, teams-based text messages, communication through various share point files, shared folders over a shared network, and so forth. We also incorporate emails with the progress made with newly established targets or goals that are reset. Depending on feedback or queries received from teammates, an assessment is made to determine if a 1 to 1 communication over a phone call or a team conference is better to accomplish a shared mental model."

P7 had also shared a similar statement "There are multiple tools that I would say I used to achieve my team's project goals." Although most participants use multiple tools

for motivating virtual team members, P8 reported using telephone as the primary form of communication to motivate virtual team members by having brief chats every day to discuss issues being faced with each project and what is expected of each member for the day.

P8 stated, "We also have brief chats every day where we just talk about the issues that we're facing and things that are going on each project. It's usually just like 5 to 10 minutes or so very quickly and I think that kind of like gets everybody still in line and everyone knows what's expected of them for the day, so that's how we've been working it so far."

Most participants used group communication, and all participants used written forms of communication. Group and written forms of communication are essential for getting the team on the same page. Some organizations have platforms they can use to communicate with each other and document the goals of the organization and project goals to be accomplished. This is also where group communication can take place on the same platform. Group calls are also common among the participants for all members to hear the same message as shared by P4, "Everybody companywide gets the same script so we're going over the same value or the same thing where we are having to discuss our inner interactive discussion about that same value and usually it'll highlight a member of a memo or an email."

P1, P3, P4, P5, P7, and P8 shared the same inferences about group communication. Group communication is usually in a huddle before work or during the day to discuss the further company and project updates. This validates Daries and Gatti's

(2019) and Larkin's (2017) research, stating communication platforms encourage increased communication to work on projects encouraging open communication to create a sense of belonging and can help virtual team members from being lonely. Group communication can engage the team to work together towards the same goal. Leaders who encourage virtual team members to work towards a goal and have a clear sense of direction and process can motivate them to accomplish project goals (Kirkman & Stoverink, 2021).

Group communication can retain team support and satisfaction, further increasing team performance (Gilli et al., 2022). This confirms Savu's (2019) research that using the wrong communication platform can cause job dissatisfaction. Herzberg's two-factor theory (Herzberg et al., 1959) aligns well with this theme because virtual team satisfaction can be maintained through positive relationships and security within virtual teams to prevent dissatisfaction. Virtual team members can be motivated if they are satisfied with their team, increasing individual satisfaction and leading to improved performance for the team and individually (Gilli et al., 2022).

Virtual team leaders should consider engaging their virtual teams by setting clear goals and aligning the organization's vision. Virtual team leaders can use multiple forms of communication that may connect with their virtual team members in a way that may work best for the virtual team member to be motivated and satisfied with the organization at a large. Virtual team leaders should keep in mind the precise alignment of goals with clear direction and empower the virtual team members to accomplish the goals while using the best communication tool for the team member (Kirkman & Stoverink, 2021).

Effective communication for both the team member and the leader, while making sure the right communication tool is used to communicate, takes time to accomplish at first, but it can be effective with practice and relationship building. Human resources within organizations should consider offering classes to their leaders on team building and effective communication to increase satisfaction with their teams and conflict management training (Gilli et al., 2022).

All participants mentioned the number of times leaders and their team members communicated; however, not all participants communicated with their team using the same frequency of communication. Table 2 shows the participants responses regarding the frequency of communication. Thirty-eight percent of the participants reported communicating with their team daily and weekly. According to Handke et al. 2022, the occurrence of communication should not be delayed for the team member to be aware of their behavior and the consequences of the task. Figure 2 shows the frequency of communication as a communication strategy to motivate virtual team members.

Emergent Theme 2: Frequency of Communication

 Table 2

 Participant's responses on frequency of communication

Frequency of communication	Frequency	Percentage
Participants	8	
Both Daily and Weekly Communication	3	38%
Daily Communication	2	25%
Weekly Communication	2	25%
Dependent on individual	1	13%

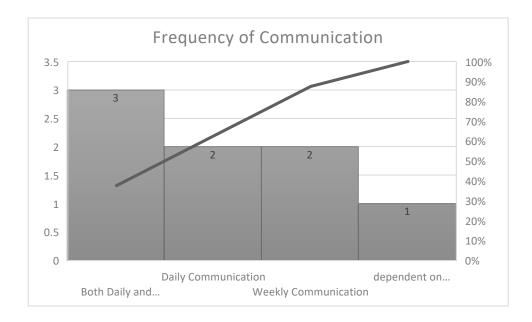


Figure 2
Frequency of Communication

P1, P4, and P8 all shared that they have daily meetings with their teams, including gathering informal information regarding the teams' families and daily activities, or time to voice any concerns or suggestions. In addition to the daily meetings, they also have weekly meetings with their team, which could be grouped or one-to-one. "I send them an email, a message, an over all meeting message email about the updates that took place, some basics, but it's just more detailed because some people on daily basis are more generalized so in the email, I just write them an email about details" shared P1. P8 shared similar statements "We started having more regular meetings daily in the morning just having quick chats, just so at least during the weekly meetings at least you said quite a bit that even if your Internet is bad someone else may be able to, you know, speak on behalf of you and say what exactly, you know, what happened in in the aspects of the project that we're concerned about at the time."

P4 shared, "I have a morning huddle with the team, and that's more or less an opportunity to just kind of check-in and ask you know how's everybody doing... My organization is very strong about communicating our values and in re-emphasizing our values and our global service standards so each morning we have a script that in the organization, which is national, so everybody in the company gets the same script, and it's just a guided conversation about one of the values or one of the global service standards, and it may have an inspirational quote on it." P4 also shared "I'm big on one-on-one so outside at the end, you know, that collective meeting with the huddle, then I may have a one-on-one once a week with an employee."

P2 and P3 shared they use one on one check-ins with their teams which is not limited to one form of platform such as instant messaging, chat features, share point sites, and telephone or video conferencing. P5 and P6 stated they have a weekly meeting with their team to gather everyone together and share updates from the organization or gather the next steps from participants in the meeting for everyone to be on the same page.

When sharing the frequency of communication P7 stated, "I soon realized that there were needs to be check-ins with the team members. Then the strategy was to understand in what frequency I should set this up so that I'm not being a hindrance to what they need to get completed but at the same time able to coach and guide them to task completion." Frequency of communication can be a challenge because even though feedback with the team should be regularly and based on the team's behavior, it is

important not to overburden the team with an increase in frequency of communication (Handke et al., 2022).

Virtual team leaders tried to develop frequencies in communicating with their team to help achieve their project goals. This validates the research by Gunasekare & Dharmasiri, 2019; Papagiannidis & Marikyan, 2019 regarding increasing communication amongst leaders and team members to increase productivity and trust to accomplish goals. This also aligns with Herzberg's two-factor theory (Herzberg et al., 1959) because increased communication may allow virtual team leaders to address frequent hygiene factors to keep their team members satisfied. This may allow virtual team leaders to use motivation factors as part of their communication strategies for motivating virtual team members to accomplish their goals.

Virtual teams can have a scheduled frequency of communication built into their organizational structure to ensure all members have shared information regarding their projects. Blocking a planned time for communication or speaking with the virtual team members on what works best for the person or team to develop a communication frequency schedule to accomplish project goals effectively is essential (Kirkman & Stoverink, 2021). With increased communication frequency, misinformation may be prevented, leading to decreased stress, improved goals, and potentially satisfied team members. An increase in communication can also help to develop a positive relationship between each the virtual team leader and virtual team member contributing to an increase in job satisfaction. When employees are happy and satisfied, they may feel more motivated to contribute to the organizational goals.

All participants took part in giving virtual team members individualized communication. Virtual team leaders provided personalized feedback based on the situation, while others provided feedback within their scheduled one-to-one sessions. Some leaders provided feedback on individual bases established on the situation and during their one-to-one session. Others only offered feedback to their virtual team members through their one-to-one sessions. Table 3 shows the participants responses to feedback communication. Figure 3 is a graph of participant responses to feedback communication.

Emergent Theme 3: Feedback Communication

Table 3Participant's responses on feedback communication

Feedback Communication	Frequency	Percentage
Participants	8	
Individualized communication	8	100%
Feedback	4	50%
Feedback and with one to one	4	50%
One to One	3	38%

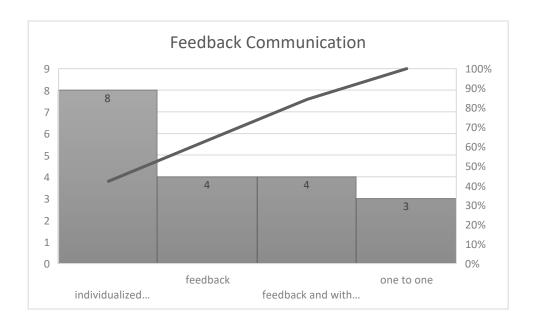


Figure 3
Feedback Communication

According to the literature by Mclarnon et al. (2019), feedback improves communication and awareness of projects which the participants validated. As P3 stated, "Timely feedback on performance that are measurable and linking those communications further into individualized contribution that each member made in order for that accomplishment is a key element. This allows the employee to understand that the leadership truly understood the extra efforts and good performance they offered that contributed to the success of a goal."

P1, P2, P6, P7, and P8 shared that their feedback communication depends on the individual's situation. That can include the style of how the person would like to be managed as shared by P2, P6, and P8. Feedback is also provided based on the individual situation mentioned by P1 and P5. Adapting the individual's style and the unique problem is important for virtual team success (Batırlık et al., 2022; Terkamo-Moisio et al., 2022).

Half the participants conduct one-to-one meetings and individual feedback outside of those meetings. The other half of the participants do not have stand-alone one-to-one meetings to provide feedback. P2 and P5 share how they provide feedback through questions they have been asked on individual bases regarding the company or any changes the company may provide. Feedback may be provided as a group through team meetings discussing changes within the company or regarding changes in the process as shared by P5. "They ask me questions on something, I can go in and make sure they've implemented whatever alerts or clinical strategies we've gone over the team meeting."

Lockwood & Song (2020) research validates this by making sure team members understand the changes that have been implemented.

The participants P3, P4, P6, and P7, expressed having individual meetings such as one-to-one and candid feedback. P7 stated, "One of the main strategies is having routine one-to-one meetings with my team. I am usually checking in on them even outside of the one-to-one call when they have a project that they're working on." P6 reports that getting feedback and noticing how people may behave is important, similar to P4 response.

Having an assessment on how the virtual team member may be handling or not handling a situation through informal communication, which can be considered feedback with increased communication, can benefit the virtual team member and affect virtual team performance. Incorporating meetings regularly for feedback and discussions is vital for team dynamics (Terkamo-Moisio et al., 2022). Virtual teams with a positive team dynamic improve overall collective goals, leading to accomplishing the project goal.

Leaders should consider including time for feedback and one-to-one meetings with their teams. According to Handke et al. (2022), virtual team leaders who incorporate feedback with team members regarding processes have improved team performance. Herzberg two-factor theory (Herzberg et al., 1959) is relevant to this study because having feedback from virtual team members can be a way to identify hygiene factors that may cause dissatisfaction. Addressing the dissatisfaction and incorporate motivating factors can encourage satisfaction between employees and the organization leading to accomplishing project goals.

Providing feedback can be through distinctive approaches; leaders can provide feedback on a team basis and individually for the team to share the same mental model. Incorporating feedback can support accomplishing a common goal on an individual and organization level, creating a sense of increased value and recognition for both the employees and the organization especially when the common goal is accomplished.

The public company documents, such as the surveys, company mission, and vision statement, did not have similarities in how virtual team leaders use their communication strategies to accomplish goals. Each public company document was specific to the company; some followed company values, and others only had a mission statement. Some participants used specific scripts from their internal organization, which was not public for all to see, yet it was a strategy used by the organization to engage their members. Not everyone in the company incorporated the script into their communication with their teams despite the tool provided. Each participating leader developed their strategy based on what they felt was best for their team.

Application to Professional Practice

The study results identified leaders' communication strategies to motivate their virtual team members to achieve their project goals. Three themes emerged from the study: (a) using different communication methods, (b) determining the frequency of communication, and (c) providing feedback to ensure a shared mental model. The study findings revealed a constellation of strategies which may be used individually or in combination to increase motivation in virtual team settings.

To accomplish project goals, team members must work in sync to reach target goals set by their organization. Using different methods of communication and providing feedback with a frequency of communication between virtual team members and virtual team leaders is vital for understanding how to keep virtual team members satisfied.

Effective communication helps to establish positive relationships between team members and their virtual team leaders, creating trust and improving creativity (Batırlık et al., 2022; Terkamo-Moisio et al., 2022). A positive relationship between virtual team members and virtual team leaders encourages members to feel free to share any hygiene factors such as work conditions or different policies that may need to be addressed to prevent employee dissatisfaction.

Virtual team leaders can also understand what motivates each employee using the study's results. Understanding the different communication methods best used for each member or used for the message being conveyed from the organization while having a regular frequency of communication and providing feedback to employees can motivate virtual team members to accomplish goals. The study results can maintain virtual team

satisfaction by using motivating factors from Herzberg's two-factor theory (Herzberg et al., 1959), such as showing acknowledgment, achievement, and recognition, motivating virtual team members to accomplish project goals. A positive environment with motivated team members is essential for team performance (Gilli et al., 2022). Enhanced team performance can inspire innovation and create a competitive advantage.

Implications for Social Change

Leaders could use communication strategies to motivate virtual team members to achieve project goals within their communities to create positive social change. Virtual team leaders can use various communication tools for organizing groups within neighborhoods or organizations to accomplish a goal within different communities or organizations regardless of location. Leaders can facilitate social change initiatives by listening to feedback from the communities and trying to understand through a frequency of communication what can motivate communities to make a positive social change.

Covid- 19 has proven to many people that regardless of location, communities can come together to work on initiatives safely and smartly (Kniffin et al., 2021).

Virtual team leaders can use these communication strategies to motivate people to come together to work on the same project regardless of location. Leaders who can motivate their virtual team members to work together can encourage creative problem solving for positive social change initiatives such as in their local communities, healthcare, or in climate change (Belbaly Aissa et al., 2022). Working on social change initiatives can be rewarding for virtual team employees, which can help employees feel

motivated through positive exchanges while working on a project they may be passionate about (Ismailov & Laurier, 2022).

Recommendation for Action

The specific business problem addressed in this study was leaders' lack of communication strategies to motivate their virtual team members to achieve project goals. This study indicated that leaders used multiple communication tools, engaged in a frequent amount of communication, and provided feedback to their teams individually or as a group to motivate their virtual teams to accomplish goals.

Organizations and leaders should pay attention to the results of this study to understand how to motivate their virtual team members to accomplish project goals. Leaders should not limit themselves to one form of communication, but they should use different communication tools to communicate with their teams. Based on the message that leaders will convey, leaders should choose the most optimal communication tool with the team or team members (Ismailov & Laurier, 2022; Terkamo-Moisio et al., 2022).

Organizations should incorporate time into leaders' schedules with their teams for daily or weekly meetings to provide the team with updates on processes. This can occur when the team shares how and what they are doing regarding projects (Batırlık et al., 2022). Having frequent meetings with the team helps build team cohesion, leading to satisfaction (Kirkman & Stoverink, 2021). The frequency of communication between members and their team leaders can help develop positive relationships improving team

and individual satisfaction (Gilli et al., 2022). Satisfaction with the team helps employees stay motivated and prevent dissatisfaction.

Not only are frequent meetings important for the team, but feedback to the team and individuals are just as important. Timely feedback meetings adjusted to team member schedules are crucial for team members to understand how they are doing with projects. Organizations should also incorporate a feedback mechanism through a one-to-one feedback meeting for each team member. Providing individualized feedback to members and as a group is imperative for members to clearly understand processes and how their work is satisfied to the organization and leader of the team (Terkamo-Moisio et al., 2022). Feedback can have motivating factors and satisfy the team member (Gilli et al., 2022). Leaders can provide feedback to amend processes and provide support in guiding the team member, trying to understand their needs by sharing emotional/ personal information to gain a relationship with the member to help accomplish goals (Batırlık et al., 2022)

The findings and recommendations of this study are relevant to virtual team leaders to engage in effective communication strategies for motivating their virtual team members. I will provide a summary of this study to the participants. I will also seek opportunities to share the findings with virtual team leaders at seminars or conferences hosted by organizations that have virtual teams. I will also intend to submit articles to the Journal of Education for Business and The International Journal of Human Resource Management to publish the findings in scholarly peer-reviewed publications.

Recommendation for Further Research

A limitation of this study is the region the data was collected and limited to eight leaders within the northeastern United States. The credibility and dependability of the interview data depended on the knowledge and experience of eight virtual team leaders. I recommend future researchers use a larger sample size of virtual team leaders. Future researchers might consider using written, validated questionnaires instead of semi-structured interviews to collect primary data from participants. I also recommend researchers collect data from virtual team members and virtual team leaders to validate the communication strategies leaders use to motivate virtual team members.

A future researcher may want to consider conducting a qualitative case study collecting data from global team leaders to explore the communication strategies virtual team leaders use to motivate their team members in different regions. This may test the transferability of the findings of the study. I recommend that a future researcher conduct a quantitative correlational study, generalizing results to a larger population. A future researcher could test the significance of the variables, such as the communication style of the leaders, the level of virtual team motivation and satisfaction, and the success rate of virtual team projects.

Reflection

The DBA Doctoral study process was a long journey for me. This taught me that I would finish a process despite how long it takes. If I put my mind to something, I will not give up. I can apply the experience I take with me to many aspects of my career and life. This study showed me that how we communicate and personalized communication

matters to people. It is essential to make individualized personal connections to accomplish goals.

I grew as a scholarly writer, researcher, and business practitioner throughout this doctoral process. I know the knowledge and experience gained from conducting this research study will be of significant value to me as I continue in my professional career. An entirely new world opened for me because of completing this study, a world that I like and will remain vested in.

Conclusion

Leaders of virtual teams motivating virtual team members to accomplish goals can be challenging. The Covid-19 pandemic forced many traditional leaders to change how they motivate virtual team members to accomplish goals. Through the lens of Herzberg's two-factor theory (Herzberg et al., 1959), this qualitative multiple case study aimed to find communication strategies leaders use to motivate virtual team members to accomplish goals. I collected data using semi-structured video and telephone conferencing interviews from eight virtual team leaders in the northeastern United States who had successfully implemented communication strategies to motivate virtual team members, with a review of relevant public company documents. I analyzed data using NVivo, and three themes emerged. The three themes that emerged were that (a) leaders used multiple communication tools to communicate with their teams, (b) conducted frequent meetings to update and communicate changes within their companies, and (c) provided feedback to their virtual team members. Virtual team leaders might use the findings of this study to improve the clarity of their communication strategies and

motivate virtual team members. Using different communication tools while providing regular communication and individualized and group feedback to their virtual team members helps develop a positive virtual environment with their teams. Herzberg's two-factor theory (Herzberg et al., 1949) can be an indicator of maintaining satisfaction and motivation in virtual team members. The implications for positive social change include the potential for virtual team leaders to improve job satisfaction and motivation among virtual team members resulting in improved creativity, innovation, and enhanced rapport by understanding how to prevent dissatisfaction within their organization.

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Appendix A: Interview Protocol

Interview Preparation

- Contact virtual team companies to obtain participant referrals and obtain permission to contact virtual team leaders.
- Contact virtual team leaders, assess each for meeting eligibility criteria, and purposefully select five participants.
- Determine the interview setting for each interview.

Opening the Interview

- Greet the participant
- Restate my role as the researcher, the purpose of the study, and explain the possible benefits of the study

Informed Consent

- Explain the process of obtaining informed consent prior to beginning the interview
- Obtain a signed informed consent form
- Notify the participant that recording the interview is for transcription purposes

Conducting the Interview using Primary Interview Questions

- 1. What communication strategies are you currently using to achieve your virtual team's project goals?
- 2. How do you know which communication strategies are more successful than others?

- 3. How have you measured your virtual team's productivity for achieving its project goals?
- 4. Which communication strategies have proven to be the most successful for motivating virtual team members to achieve their project goals?
- 5. If you have identified the most successful strategies, what are your organization's key processes to implement them?
- 6. What are the key barriers you have identified in implementing your communication strategies?
- 7. How did you address these barriers?
- 8. What else can you share with me about your communications strategies for motivating virtual team members to achieve their project goals?

Follow up with Probing Questions

- · Once participant answers an interview question, follow up with probing questions
- · Ask clarification questions if needed

Theme Verification

- · Ask participant about major themes that emerged during the interview
- · Ensure full understanding of the participant's perceptions of the emergent themes

Coding

- · Explain the coding procedure to protect the participant's confidentiality
- · Reassure the participant that no names appear in the published study
- · Remind the participant that all raw data, transcripts, and recordings remain secured in a locked file

- · Code each participant's name
- · Secure all notes, raw data, transcripts, and recordings

Recording Reflexive Notes

- · Record reflexive notes during the interview
- · Observe and note participant's actions or reactions

Ending the Interview

· Thank the participant for their time and information ·

Explain the member checking process

· Set up a follow-up meeting for member checking

Appendix B: Invitation to Participate E-Mail or Telephone Script Hello, my name is Monica Metri. I am a doctoral student at Walden University conducting a study on motivational communication strategies to motivate virtual team members to accomplish project goals. I identified you as a potential participant in my research through publicly available resources. I would like you to consider being a participant in my study, agree to participate in a 45-60 minute virtual face-to-face interview, and agree to a 30-minute follow-up meeting so that you could review my interpretation of your interview responses. This study could benefit virtual team leaders by providing effective motivational communication strategies to motivate their virtual team members to accomplish project goals. The eligibility criteria for participation are a virtual team leader located in the northeastern United States and implemented motivational communication strategies that accomplished virtual team project goals within the past year. If you meet the eligibility criteria, would you be willing to participate? Participation is voluntary, and you have the right to withdraw from the study at any time. If you are willing to participate, please reply to this e-mail, or you can call me. If you would like additional information or have questions before agreeing to participate, please contact me using the information below. If you agree to participate, I can forward you an informed consent form to formally convey your rights as a participant. You can also provide informed consent by replying *I consent* to the e-mail. Thank you so much for your consideration.

Monica Metri	
E-mail address:	Telephone: