TRANSFORMATIONAL LEADERSHIP TRAITS AND JOB SATISFACTION AMONG U.S.TECHNOLOGY PROFESSIONALS: AN EXPLORATORY QUALITATIVE EXAMINATION

Bridget Bratt

A Dissertation

Submitted to Franklin University in partial fulfillment of
the requirements for the degree of

DOCTORATE OF BUSINESS

March 2023

Committee:

Greene, Tracy, Ph.D. , Committee Chair

Pajo, Bora, Ph.D. , Committee Member

Reymann, Tim, Ph.D. , Committee Member

Franklin University

This is to certify that the dissertation prepared by

Bridget Bratt

"Transformational Leadership Traits and Job Satisfaction Among U.S. Technology Professionals: An Exploratory Qualitative Examination"

Has been approved by the committee as satisfactory completion of the dissertation requirements for the degree of

Doctor of Business Administration

Dr. Tracy Greene
Dr. Tracy Greene (Mar 9, 2023 12:33 EST) — 03/09/2023

Dr. Tracy Greene, Committee Chair and Doctoral Adjunct
Franklin University

Bora Pajo (Mar 9, 2023 13:44 EST) — 03/09/2023

Dr. Bora Pajo, Committee Member and Dir. of Dissertation Process
Franklin University

Timothy F. Reymann (Mar 9, 2023 14:12 EST) — 03/09/2023

Dr. Tim Reymann, Committee Member and Chair, DBA
Franklin University

Wendell Seaborne — 03/09/2023

Dr. Wendell Seaborne, Dean, Doctoral Studies
Franklin University

FRANKLIN UNIVERSITY
Doctoral Studies

(THIS PAGE WAS INTENTIONALLY LEFT BLANK)

Abstract

Leadership styles and traits are well-researched across multiple industries and countries. Still, limited studies exist on the impact of these behaviors on job satisfaction and, ultimately, on organizational culture for technology professionals. Leaders within technical disciplines have generally been promoted through the ranks, possessing vast specialized knowledge but seemingly lacking transformational leadership skills and awareness of organizational culture. Job satisfaction is a culmination of leadership skills and external influences. The critical drivers for creating and sustaining cultural norms are behaviors, systems, and symbols. How these drivers are developed and passed down to employees can impact job satisfaction, engagement, and organizational commitment.

This qualitative study will explore the divergence between what is currently understood and what is still largely unknown about transformational leadership traits, organizational culture, and job satisfaction among technology professionals in the United States. The research question to be answered is:

RQ: What transformational leadership traits enhance U.S. technology professionals' job satisfaction?

In addition, interviews with current technology professionals will allow participants to share their occupational experiences and opinions on leadership and organizational culture. This research will fill a gap in the literature regarding leadership behaviors, organizational culture experiences, and job satisfaction among U.S. technology professionals.

Keywords Transformational leadership, organizational culture, job satisfaction, information technology:

I want to dedicate this dissertation to my life's most important and influential people. First, to my mom, Jacqueline May Geary (April 5, 1936 to January 20, 2007), because you taught me I could be anything I wanted to be, and you allowed me to try and fail without judgment. You encouraged me to be fearless, strong and never back down. I am my mother's daughter. To Raymond Louis Geary, Sr. (November 27, 1933 to July 21, 2019) because you were one of the most intelligent people I have ever known that didn't even finish the tenth grade, but you never stopped learning and teaching me. You were tough on me, but it made me a better student, learner and person. To my sister, Kimberly Ann Giddinge, because you always supported me and knew I could achieve anything, even when I didn't think so. And to my husband, Jared Bratt. Words cannot express how much your love, support and sacrifices have meant to me and enabled me to achieve a very important, seemingly impossible, personal goal. Thank you for your continued tolerance for my absence as I focused on finishing. And to my wonderful in-laws, Doc and Mary Bratt, who have treated me as one of their own since they met me, and provided me the love and support my parents would have given me if they were still here. Having you as my champions allowed me to achieve this major milestone. And finally, to all of my in-laws: Eric, Marti, Simon, Jonah and Charlie Bratt; Andy, Sarah, Will and Liz Bratt; and Alison, Tyler and Evelyn Fisher. You have all treated me like a blood sister, and aunt, and that has meant so much to me. Thank you for your love and support.

Acknowledgments

I want to give a huge thanks to my doctoral committee for all of the understanding, support and guidance they have given me throughout my doctoral journey. To Dr. Tracy Greene, I could not have asked for a better academic advisor and committee chair. You were always encouraging, and your feedback on my work was so helpful during this process. To Dr. Tim Reymann, your knowledge and expertise on transformational leadership kept me on track and ensured my work was thorough and valuable to the research community. And to Dr. Bora Pajo, our relationship throughout my entire doctoral journey has been invaluable, both personally and academically. Your direct, thoughtful advice was always on point and ensured I did not get lost in the weeds.

To my tribe: Amy, Andy, Latania and Ty-Juan. Having all of you to laugh with, vent to and celebrate with for the past few years has helped keep my sanity and push me forward. I cherish our relationships and hope our friendships and support of each other continue long after we are all doctors. And don't forget, once we all graduate, we have to meet in the middle to celebrate. I am planning for it!

Finally, thank you to my coworkers for allowing me to interview some of you, and especially my local Columbus office, for the consistent support you have given me during this process. I am truly grateful to work with such intelligent and thoughtful people.

Table of Contents

List of Figures

List of Tables

Introduction

Background

The effectiveness of management styles has arisen as a focus of interest in management studies during the last few decades (Yu et al., 2016). Empirical data has supported a contingency notion that some antecedents, such as management styles and company culture, have the potential to influence employee behavior (Luthans & Stajkovic, 1999). Both leadership and culture are linked to a variety of aggregated attitudes and behaviors (Derue et al., 2011; Hartnell et al., 2011), but there is a paucity of theoretical and empirical research on the interaction of leadership and culture on organizational effectiveness (Burns et al., 2013). This lack of focus is unexpected, given that a leader's effectiveness is determined by the interplay between the leader and the social and organizational environment (Dinh et al., 2014; Fiedler, 1996). As a result, a senior leader would have to factor the nature of the company culture into his or her approach to leadership (Klimoski, 2012). A study by Bennett (2009) revealed that IT (Information Technology) professionals expect their managers to support them with coaching, mentoring, and career development for growth plans. Furthermore, subordinates who perceived higher degrees of transformational leadership traits reported higher levels of satisfaction with their direct management (Bennett, 2009).

Long work hours, tight deadlines for project completion, relationships with superiors and subordinates, compensation, and stressful working environments are elements that technology employees must contend with and can cause job dissatisfaction (Chanaka Kumara & George, 2020). IT Professionals have distinctive qualities, and it has been demonstrated that it is not easy to identify objective measurements of IT workers, primarily due to the complexity of the work (Banker & Kemerer, 1989). Glen (2003) asserts that information technology professionals are

increasingly moving from the "backroom" to the foreground. As a result, their people skills must be honed as this has not traditionally been a focus (Olagundoye, 2019). As IT professionals are promoted to managerial positions primarily based on their technical abilities, they frequently lack interpersonal and leadership skills. The root cause is that either their specialty's framework leads to narrow viewpoints/blind spots or they have received a lack of adequate leadership support, coaching, and mentoring (Thite, 1999).

Workplace variables inspire technology professionals, such as effective leadership, healthy peer relationships, a positive organizational culture, challenging work, and respect (Abii et al., 2013; Tobing & Syaiful, 2018). Surprisingly, IT professionals do not consider compensation a critical factor in their career decisions (Korsakienė et al., 2014; Tobing & Syaiful, 2018). Such findings show that organizational leaders must carefully investigate the factors that inspire people (Tobing & Syaiful, 2018). Creating an organization's culture is a gradual process, and once established, it serves as a source of motivation, empowerment, and unity for its members (Li, 2015). One factor influencing employees' performance in technology-focused companies such as Google and Microsoft is a conducive and friendly working environment (Isac et al., 2021). An open environment allows the expression of ideas, participation in decision-making processes, and development and growth through coaching, mentoring, and collaboration (Isac et al., 2021).

Definitions of Key Terms

Technology Professionals: The four main pillars of IT professionals are business computer network and database management, information security, business software development, and computer tech support (Kumar, 2014). These pillars can be broken down into cybersecurity

analysts, technology product owners and implementers, data security and privacy associates, technology strategists, data management professionals, and technology leaders who drive technological innovation and transformation (Bennett, 2009; Burrell et al., 2018; Mclean & Smits, 2014).

IT Leadership: The IT function within enterprises is highly specialized and requires a professional understanding of IT, the company, and the business industry (Hickman & Akdere, 2018).

Table 1

IT/IS Leadership Roles

IT Leadership Roles	Description
Technologist	Uses technical expertise to develop and maintain cost-effective information systems, advises business managers regarding matters relating to information technology, stays abreast of emerging technological developments, and projects their potential impact on the IT function and the business
Enabler	Work closely with the user community to help them maximize the business uses of their present capabilities and networks. Communicate with users to understand their present and future IT needs and act as their advocate within the organization.
Innovator	Strives for leading-edge IT processes by reengineering existing systems, updating existing technology, retooling the staff, and creating an environment for experimentation and innovation.
Strategist	Serves as the boundary-spanner between the IT function and business strategists to ensure that the business is aware of the strategic opportunities made possible through IT and that the organization is ready to provide support and leadership for new business initiatives.

Adapted from Management, Leadership and the Roles of the CIO by E. McLean and S. Smits, 2014.

Transformational Leadership: Transformational leadership is exemplified by leaders who cultivate the potential of their followers through inspiration, intellectual stimulation, and empowerment, hence fostering innovative work behavior (Li et al., 2019). The style is comprised of four dimensions: Idealized influence, inspirational motivation, intellectual stimulation, and

individual consideration (Bass, 2008). These four dimensions of transformational leadership influence followers' attitudes, motivation, and actions in complex ways (Carroll et al., 2019; Long et al., 2017; Rehman & Waheed, 2012)

Organizational Culture: Schein (2004) defines organizational culture as a pattern of shared underlying assumptions discovered by a group as it solves external adaption and internal integration issues. Organizational culture fosters a sense of identity and belonging for employees while also influencing desired organizational actions through the intersection of organizational values and individual values (Aydin, 2018; Dulkpado et al., 2013; Ertosun & Adiguzel, 2018) Cultures can vary significantly within and between organizations. They can bring out the best in people and create excellent working conditions, or they may bring out the worst in people and create dysfunctional workplaces riddled with stress and anxiety (Warrick, 2017).

Job Satisfaction: Job satisfaction is defined as an overall affective orientation on the part of employees toward individual activities and duties allotted to them in completing the organization's objectives (Weiss et al., 1967; Locke, 1969; Belias & Koustelios, 2018).

Statement of the Problem

Recent data shows that employment in computer and information technology occupations is projected to grow 13% from 2020 to 2030, faster than the average for all occupations (U.S. Bureau of Labor Statistics, 2022). As a result, these occupations are projected to add about 667,600 new jobs (U.S. Bureau of Labor Statistics, 2022). However, employee turnover remains a fundamental issue for technology professionals, accounting for 3.4% of total resignations in May 2022 (U.S. Bureau of Labor Statistics, 2022). According to research, job satisfaction

increases when employees believe their leaders advise them effectively (Kumari & Pandey, 2011); consequently, an effective leadership style enhances job satisfaction, fostering low employee turnover (Iqbal et al., 2020). However, recruiters report that transformational leadership potential is overlooked while evaluating technology candidates (McCarty, 2019; Sunarsi et al., 2021). Instead, recruiting managers prioritize technical expertise and other skills over leadership (Grenny & Maxfield, 2017; McCarty, 2019; Sunarsi et al., 2021).

Forty-two percent of technology organizations do not provide soft skills training, such as leadership development, for technical workers (McCarty, 2019). Meanwhile, technical subject matter experts, such as developers, database administrators, or highly technologically focused professionals, are promoted to technology managers without formal leadership training (McCarty, 2019). According to Oltsik (2017), a significant gap in preparing technical experts to transfer to leadership roles is the lack of leadership development programs for cybersecurity and information technology professionals (Burrell et al., 2018).

Research Question

In order to expand the current body of knowledge related to transformational leadership traits, organizational culture, and job satisfaction within the technology profession, this study will provide scholarly background to address the following research question:

RQ: How do transformational leadership traits influence technology professionals' job satisfaction?

Purpose of Study

This exploratory qualitative study investigated transformational leadership traits and behaviors on job satisfaction and organizational culture among technology professionals. One

critical component of a company's success is for leaders to manage and drive their IT personnel to realize their full potential, be engaged, embrace change, and make sound technical judgments (Bennett, 2009). Leaders must do more than handle day-to-day operations. Leaders must provide direction that encourages employees to take more ownership of issues and problems, to think outside the box more to solve business difficulties, and display self-sacrifice for the betterment of the team and organization: transformational leadership supports these goals (Anvari et al., 2014; Rijal, 2016; Pradhan et al., 2017).

The relevance of technology leaders in influencing the value of IT in organizations has been underlined by research, notably their role as captains of IT human capital and their contribution to converting IT from a pure backend service structure and cost center to a business partner (Oberer & Erkollar, 2018). There has been little research on job satisfaction in the IT sector, notably in the IT software industry (Agarwal & Mehta, 2014). The dynamics of the IT sector are incredibly distinct from those of other sectors, and tech leadership delivers business value by offering IT strategies that align with business goals (Martinez-Simarro et al., 2015) and by taking on new leadership roles, such as that of a business and innovation facilitator (McLean & Smits, 2014).

Significance of the Study

This study aims to fill a gap in the research and understanding of technology professionals' motivations, leadership preferences, and influence on job satisfaction and organizational culture. In addition, few studies have examined the mediating aspects that influence how transformational leadership impacts followers' performance and job satisfaction concerning the quality of relationships and enjoyment of the work among IT professionals

(Carter et al., 2012). There is also an apparent disconnect between the causes and effects of how employees perform regarding transformative leadership (Irshad et al., 2014).

The information gained from this investigation could impact how technology leadership can more effectively communicate, support, and encourage IT professionals. Considering these professionals cite leadership and positive organizational culture as two of the main drivers for job satisfaction, having a deeper understanding of leadership traits that influence these factors could result in less turnover and higher productivity (Thomas, 2015).

Assumptions, Limitations, and Delimitations

Assumptions

Considering that this research is built on the foundation of previous literature and research studies, it is assumed that the information is accurate and complete. Furthermore, as this is a qualitative analysis, it is assumed that the research participants gave honest and accurate responses when interviewed.

Limitations

A potential limitation of this study is the representation of the sample size to the larger population.

Delimitations

This study was limited to technology professionals employed in the United States.

Organization of the Dissertation

The study is divided into five chapters by the researcher. The first chapter provides an overview of the research. This chapter also includes the problem statement, study purpose, research question, study significance, the definition of terms, and assumptions and limitations.

The second chapter is a literature review covering transformational leadership theory and research, turnover rates of technology professionals, organizational culture theory and application, and job satisfaction. Chapter Three describes the researcher's technique, a research description, study design, the sampled population, study instrumentation, data collection and analysis, and study limits. The fourth chapter discusses the investigation's findings. Finally, chapter Five describes the study's conclusion, incorporates all examined results, and recommends further research.

Chapter 2: Literature Review

According to research, job satisfaction increases when employees believe their leaders advise them effectively (Kumari, 2011) and enhancing job satisfaction fosters lower employee turnover (Iqbal et al., 2020). However, recruiters report that transformational leadership potential is overlooked while evaluating technology candidates (McCarty, 2018). Instead, recruiting managers prioritize technical expertise and other skills over leadership (McCarty, 2018). Meanwhile, technical subject matter experts, such as developers, database administrators, or highly technologically focused professionals, are promoted to technology managers without formal leadership training (McCarty, 2018). In addition, Lacity et al. (2008) researched IT professionals' turnover intentions. They determined that work satisfaction, organizational satisfaction, and social norms that build organizational culture influence turnover intentions (Korsakienė et al., 2014).

The central takeaways from the existing literature reveal a focus on transformational leadership's relationship to overall job satisfaction in the technology sector. This research is relevant as the technology industry has grown exponentially, adding 178,000 new tech jobs in 2022, and the United States is the world's market, accounting for 33% of the total market share, or nearly $1.8 trillion in 2022 (CompTIA, 2022). Therefore, businesses must capitalize on the disruptive shift in the IT-business dynamic by actively seeking interpersonal, communication, and team-building technologists to succeed in an integrated business setting and develop into leaders (West Monroe Partners, 2018). The problem is formalizing a method for evaluating prospects for needed soft skills and leadership potential (West Monroe Partners, 2018).

Bass (1985, 1990, 1999) states that transformational leaders elicit their followers' respect, trust, and loyalty. In addition, transformational leaders prioritize their followers' needs while

supporting leadership skill development and enabling decision-making participation (Bass, 1985; Bass & Avolio, 1995, 2004; Bass & Riggio, 2006; Berger et al., 2012). Effective transformational leadership development programs for technology professionals should address the soft skills deficit while lowering attrition, enhancing commitment, improving change management results, and raising job satisfaction (Hickman & Akdere, 2018). To be the strategic partner required for organizational success in today's global economy, IT must identify methods to strengthen and retain its leadership competencies (Hickman & Akdere, 2018).

This literature review will provide scholarly background to explore the following research questions:

RQ: What transformational leadership traits enhance technology professionals' job satisfaction?

Several themes emerged from the existing literature. The first theme highlights the relationship between transformational leadership traits and job satisfaction. Research has concentrated on understanding the relationship between transformational leadership and employee turnover rather than offering a way to understand the relationship's underlying process (Bycio et al., 1995; Hughes et al., 2010). Researchers have examined the relationship between transformational leadership style and turnover intention (Griffith, 2004; Kleinman, 2004; Walumbwa & Lawler, 2003; Walumbwa et al., 2005), but the impact of transformative leadership style on turnover intention is little understood. According to a study conducted by Omar (2011), the interaction between transformational leadership components (individualized consideration, inspirational motivation, idealized influence, and intellectual stimulation) had a beneficial impact on the job satisfaction of 218 public and non-public company employees in Argentina (Long et al., 2017). Transformational leadership produces motivated individuals that

go above and beyond their job responsibilities to benefit the company and achieve organizational goals (Li et al., 2019; Nasir, 2021; Purvanova et al., 2006).

A second theme is a connection between transformational leadership and organizational culture. Organizational culture is analogous to a strong chain that allows an organization to become stable (Bidokhti, 2000). The organizational culture consists of leaders' values that shape intra-organizational behaviors. Furthermore, the organization's members intervene in such ideals (Veiseh et al., 2014). Relevant studies by Acar (2011), Rasid et al. (2013), and Park (2011) indicate that transformational leadership impacts organizational culture directly or indirectly (Lee & Cho, 2018). Studies by Top et al. (2015) and Belias and Koustelios (2014) found high-tech companies to be flexible, adaptable, and have informal organizational structures without bureaucratic policies or procedures (Tran, 2020).

Organizational culture, in addition to transformative leadership, is considered to impact employee job motivation. Some scholars claim that organizational culture can influence job motivation (Putra & Dewi, 2019). According to Mahal's 2009 research, organizational culture is positively associated with job motivation. Thus, leaders must continuously work on their organizational culture to increase employee motivation (Tsai, 2011). Anra & Yamin (2017), Tobing & Syaiful (2016), Krisnanda & Surya (2019), and Pramudjono (2015) found that corporate culture can have favorable and unfavorable impacts and significant influences on job motivation. Therefore, a good organizational culture that supports job motivation can help organizations increase motivation (Radakovich, 2016).

A pattern from the existing literature revealed minimal research on how transformational leadership can effectively motivate technology professionals throughout the US to achieve the best organizational outcomes. This study aims to fill a gap by qualitatively interviewing

individuals at various levels who perform a professional role within a technology consultancy, industry, or field. In addition, few studies have examined the mediating aspects that influence how transformational leadership influences followers' performance and job happiness, such as relationship quality (Carter et al., 2012). There is also an apparent disconnect between the causes and effects of how employees perform regarding transformative leadership (Irshad et al., 2014).

The third theme explores several management scholars who have maintained that employee performance and leadership style contribute immensely to organizational performance (Almatrooshi et al., 2016). Employees can be motivated to go above and beyond their everyday responsibilities through a leader's charisma, mutual agreement, and a shared passion for the company's goals and vision (Pradhan et al., 2018).

Gaps in the Literature and Precedent Research to Justify Central Research Issue

Considerable experiential research (quantitative, qualitative, and meta-analyses) on transformational leadership and organizational culture exists. Unfortunately, the theories still outnumber practical applications (Yammarino, 2013). Theories of effective leadership behaviors, such as transformational leadership (TL), have been well-established (Avolio et al., 2009; Bono & Judge, 2004; Day et al., 2014; Top et al., 2015). However, there is a lack of understanding of developing practical leadership skills among technology professionals (Hetland et al., 2007; Hickman & Akdere, 2018; Kakabadse & Korac-Kakabadse, 2000; Sumner et al., 2006; Thite, 1999).

Although there has been significant research on Transformational Leadership, Transactional Leadership, and Laissez-Faire Leadership since the 1980s, there has been little research in the Information Technology domain (Bennett, 2009). Research on how leadership traits influence organizational culture exists for technology professionals in several countries,

such as India (Bhalerao & Kumar, 2016; Patrick, 2018), Malaysia (Anvari et al., 2014; Masrek et al., 2014; Mohammad et al., 2014), and Israel (Ladelsky & Catana, 2013). However, research is minimally available on the influence of leadership traits on organizational culture for US technology professionals (Bennett, 2009; Burrell et al., 2018). Although recent empirical evidence suggests a positive relationship between leaders and organizational culture (Berglund, 2014; Duarte, 2010; Warrick, 2017), little is known about the impact of transformational leadership traits on the Organizational Culture dimensions of employee engagement and satisfaction in technology environments (Deveaux, 2020).

Shafie, Siti-Nabiha, and Tan (2014) conducted a literary study to show the research gaps between organizational culture and transformational leadership's impact on creativity, and case studies were conducted on how culture and transformational leadership can affect corporate development. Because markets shift and technology constantly evolves, businesses must understand how transformational leadership affects culture and business development (Shafie et al., 2014). Karaminia, Salimi, and Amini (2010) discovered a direct relationship between transformational leadership style and organizational culture after investigating leadership style, culture, and organizational commitment in the armed forces. The findings indicate that culture affects various leadership and management approaches (Schein, 1984, 2004; Veiseh et al., 2014). Furthermore, studies found that transformational leadership significantly impacts elements such as employee commitment, job stress, job satisfaction, and organizational culture (Bass, 1985; Bryson, 1998; ElKordy, 2013; Rijal, 2016).

However, there are existing studies on the correlation between transformational leadership and organizational culture, but not specifically within the technology sector, which creates a gap in the literature. Organizational culture and transformational leadership are

frequently discussed separately and rarely in the context of the information technology profession.

The significance and traits of transformational leadership and organizational culture drivers are examined in this chapter. An investigation of transformative leadership's effects on job satisfaction and organizational culture among technology practitioners will also be done. The importance of vision in transforming culture, gaps in the literature, and intersections between disciplines will be examined. These sections address previously studied and new insights into the subject matter in the literature and any commonalities between certain aspects. This study will fill a knowledge gap in the literature about transformational leadership attributes and organizational culture in the technology industry in the United States.

Theoretical Framework: Transformational Leadership

Leadership style, specifically the full-range leadership model, is the theoretical foundation of the independent variable of leader outcomes (Bass & Avolio, 2004). The leadership style is a mixture of several features, traits, and behaviors that leaders employ when interacting with subordinates (Mitonga-Monga & Coetzee, 2012). Modern leadership styles can be classified as follows: (1) transformational leadership, (2) transactional leadership, (3) culture-based leadership, (4) charismatic leadership, and (5) visionary leadership (Al Khajeh, 2018). Depending on their attitude, managers in organizations employ various leadership styles, and the orientation of a manager may be influenced by the manager's culture, education system, or corporate environment (Wakabi, 2016).

James Downton (1973), who coined the term "transformational leadership," is credited with laying the foundation for the Transformational Leadership Theory. From there, one can trace the theory's origins through Robert House's "1976 Theory of Charismatic Leadership" to

James MacGregor Burns' book Leadership (Burgess, 2016). According to the initial theory developed by Burns, transformational leaders try to improve existing ideas, approaches, and goals (Bass, 1999). He posited that transformative leaders focus on their people's basic needs (Bass, 1999). Bass (1985) operationalized Burns's 1978 study by discussing psychological mechanisms and their application to business organizations. Bass discussed transformational leadership, emphasizing the word "transformational" above "transforming," emphasizing the action of modifying and molding followers' behaviors (Buil et al., 2019).

Formulating a vision, organizing commitment to the goal, and institutionalizing change are the three transformational leadership activities defined by Tichy and Ulrich (2008). In terms of organizational performance, transformational leadership appears to be one of the essential variables for leaders to consider when striving to create and improve their operations (Chanaka Kumara & George, 2020). In addition, transformational leaders can influence job satisfaction by demonstrating humility, authenticity, and courage; forgiving employees for their mistakes; standing back and giving credit to others; holding them accountable for outcomes within their control, and developing and empowering them (Akdol & Arikboga, 2015).

Before 1970, most leadership studies concentrated on the leader as a person, the group they led, and the efficacy of that group (e.g., Ohio State, Michigan, and Illinois leadership studies reviewed in Bass, 2008; Yukl & Mahsud, 2010). Then, in the 1970s, there was a shift in leadership research in terms of analysis levels (Cerfontyne, 2020). Within each group, the focus of the investigation changed to the various leader-follower (superior-subordinate) dyadic relationships (Yammarino, 2013). After House's theory of charismatic and visionary leaders introduced transactional and transformational leadership styles, Burns' initial distinction between

transformational and transactional leadership laid the framework for the full range of leadership theories (Cerfontyne, 2020).

Charisma is a characteristic of transformational leaders and is a Greek word that roughly translates as "divine gift," such as the capacity to accomplish miracles (House, 1976). This word was applied by Weber (1947) to describe leader influence, emanating not from formal authority but from follower perceptions of the leader being endowed with exceptional qualities (Mittal, 2015). Weber (1947) also presented the idea of charisma in his early foundational work. He stated that a leader's authority might be defined via their followers (Beck-Tauber, 2012). Transformational leadership is more specifically relevant to organizational change than any other theory on effective leadership conduct (Beck-Tauber, 2012).

By presenting a compelling vision and enhancing followers' confidence in realizing it, charismatic leaders create excitement and commitment in their followers (Mittal, 2015). In addition, the charismatic leader produces a radical change in the organization by acting confidently in inventive and effective ways and is perceived to have achieved remarkable success by the organization's members (Conger & Kanungo, 1998). As a result, followers' perceptions of the leader influence the attribution of charisma–charisma is in the eye of the beholder (Mittal, 2015).

The following chart provides the seminal definitions of transformational leadership:

Seminal Transformational Leadership Definitions	Source	Year
The basis for the charismatic appeal is the emotional interaction between followers and their leader. Charismatic leaders are those who, by force of their abilities, are capable of having profound and extraordinary effects on followers	House	1977
…is a process where leaders and followers engage in a mutual process of raising one another to higher levels of morality and motivation	Burns	1978
Transformational leaders change their culture by	Bass	1985

first understanding it and then realigning the organization's culture with a new vision and a revision of its shared assumptions, values, and norms		

Transformational Leadership Theory is one of the most influential leadership theories of the last two decades, emphasizing the direct impact of leaders on individual followers (Zwingmann et al., 2014). Research shows a positive relationship between transformational leadership and followers' attitudes and behaviors (Zwingmann et al., 2014). Furthermore, transformational leadership is a collaborative process that aims to change ourselves, our subordinates and colleagues, and the organization to achieve new goals and objectives (Burns, 1979). Transformational leadership moves the follower beyond immediate self-interests through idealized influence (charisma), inspiration, intellectual stimulation, or individualized consideration (Bass, 1999). It raises the followers' maturity and ideals and worries about achievement, self-actualization, and the well-being of others, the organization, and society (Bass, 1999).

Though not always desirable, charismatic leaders have significantly impacted an organization's performance (Yukl, 2008). However, scholars (Conger, 1990; House & Howell, 1992) have noted that charismatic leadership can have a "dark side" that can overshadow the positive aspects to the detriment of both the leader and the organization by infusing instability and uncertainty into management and decision-making processes (Mittal, 2015). Restricting and eliminating dissent from influential leaders is one of the most destructive and widespread manifestations of the leadership's shadow side (Kassing 2011). Leaders have the authority to articulate a "vision" and ensure that others implement it, while followers are often expected to obey commands rather than pose questions (Tourish, 2013).

4 "I" 's of Transformational Leadership

In his 1985 work, Bass fully developed the concept of the "4 I's" of Transformational Leadership. These four distinct components or traits help to define transformational leaders. In addition, to "create the strategy culture alloy" for technology organizations, transformational leaders must combine creative insight, tenacity and energy, intuition, and sensitivity to the needs of others (Avolio & Bass, 1995). In Bass and Avolio's (1993) most influential interpretations of transformational leadership, the four components that create the “I’s” are: "Idealized Influence, Inspirational Motivation, Intellectual Stimulation, and Individualized Consideration." First, a transformational leader defines an idealized effect so that followers see them as role models (Rabie et al., 2016). Second, inspirational motivation describes a transformative leader's behavior in which they encourage others by giving significance and challenge to their actions (Rabie et al., 2016). Third, intellectual stimulation is associated with a transformational leader who encourages followers to be innovative and creative (Rabie et al., 2016). Finally, individualized consideration means that a transformational leader concentrates on each follower's needs in their achievement (Penava & Šehić, 2014).

A transformative leader demonstrates idealized influence so that followers see them as role models (Bass, 1985). Inspirational motivation is how a transformational leader encourages and stimulates others by giving meaning and challenging what they do (Penava & Sehic, 2014). A transformational leader inspires people to be imaginative and creative, question current assumptions, re-shape difficulties, and tackle old problems and situations in new ways through intellectual stimulation (Penava & Sehic, 2014). These leaders define and structure their duties and those of their subordinates in order to achieve corporate objectives. Finally, personalized

consideration means that a transformational leader pays close attention to the demands of each follower in terms of personal growth and achievement (Penava & Sehic, 2014).

Individualized Consideration

Individualized consideration refers to a leader's ability to perceive and comprehend their followers' developmental requirements, listen to their concerns, and treat them equally (Li et al., 2019). Relational engagement allows leaders to assist followers in achieving their intended goals and developing their potential (Ghasabeh et al., 2015). The leader serves as a coach, encouraging their followers to pursue their most remarkable qualities (Veiseh et al., 2014). In addition, individualized consideration focuses on understanding employees' specific needs and empowering followers to create a learning climate (Lowe et al., 1996) and mobilize support for organizational goals (Ghasabeh et al., 2015).

Intellectual Stimulation

When transformational leaders portray themselves as role models for their followers, intellectual stimulation can occur (Bass, 1985). It is the ability to test expectations, risk-taking, critical thinking, and solving difficulties (Li et al., 2019). In addition, transformational leaders push their followers' inventiveness by stimulating the mind (Bass, 1985). In other words, followers are encouraged to share fresh ideas for resolving organizational issues (Abou-Moghli, 2018). In such circumstances, new approaches to organization development are presented (Veiseh et al., 2014).

When working under the guidance of a transformational leader, employees in technology organizations are encouraged to contribute ideas and find solutions to problems as they arise (Bass & Riggio, 2006). Bass and Riggio (2006) and Warrick (2011) agree that a transformational leader listens to ideas, never criticizes ideas offered to the organization, engages team members

in problem-solving and solutions, and empowers each individual to succeed. In addition, transformational leaders foster creativity and problem-solving by questioning an individual's preconceptions, reframing the issue, and attacking old challenges in new and imaginative ways (Wells, 2017).

Inspirational Motivation

The capacity of technology leaders to convey common aims and a clear and convincing vision that encourages followers and raises positive expectations is inspirational motivation (Li et al., 2019). The term "inspirational motivation" refers to leaders who strengthen their commitment by assisting their followers in participating in future activities (Veiseh et al., 2014). Through the leader's dedication to the group's goals, transformational leaders communicate the shared vision and mission of the work being accomplished by the team, clearly define the expectations, and include team members in imagining the future state of the business (Bass & Riggio, 2006). In addition, Devanna and Tichy (1990) also discovered that the capacity to connect to the employees' more profound sense of meaning is a vital characteristic of a transformational leader (Wells, 2017).

Idealized Influence

In training and elsewhere, Avolio and Bass (1995) preferred to use the phrase "idealized influence" instead of "charisma." Selfless ideal causes, to which leaders and followers can devote themselves, are at the highest level of morality. Serving one's organization to the best of one's ability may be motivating (Bass, 1999). Idealized influence is the ability of technology leaders to motivate followers to trust and recognize the charisma of their leaders and their mission (Li et al., 2019). Idealized influence aims to create a shared vision and strengthen ties with followers (Ghasabeh et al., 2015), and those leaders exemplify activities that highlight collective interests,

including promoting a collective sense of purpose, making personal sacrifices for the group's sake, establishing a personal example, and displaying ethical standards (Zdaniuk & Bobocel, 2015).

The feelings of respect and loyalty among followers are valued by transformational leaders, who emphasize the need for a solid commitment to achieving organizational goals (Nasir, 2021). Put another way, intentional and idealized influence enables leaders to treat their followers respectfully (Veiseh et al., 2014). In addition, transformational leaders know whom to unite and whether each person is qualified to lead the change process; the leader must ensure that the correct person is in charge of the change process (Warrick, 2011). According to Warrick (2011), a transformative leader quickly adjusts to changes and provides opportunities for all levels of the business to grow, acquire current trends and information, and participate (Wells, 2017). A transformative leader is a role model admired and revered by subordinates (Bass, 1985, Bass & Avolio, 1993). As a result, it may be suggested that organizational members consider information technology a significant resource since a transformational leader serves as a role model for them (Ghasabeh, 2020). Similarly, Yee (2000) and Seyal (2015) argue that a transformational leader acts as a role model by emphasizing the value of effective information technology utilization (Ghasabeh, 2020).

The literature extensively documents the favorable association between transformative leadership and followers' behavior (Camps & Rodríguez, 2011; Chen, 2004; Erkutlu, 2008; Limsila & Ogunlana, 2008; Lo et al., 2010; McGuire & Kennerley, 2006). Understanding the core characteristics of a transformational leader, including charisma, empathy, relationship building, and kindness, can assist researchers with insights into how this leadership style may

increase overall job satisfaction, organizational commitment, and innovation (Chandrasekara, 2019).

InformationTechnology Professionals: Leadership and Job Satisfaction

IT professionals are the creative minds behind information technology systems. They develop software for specific functions, create strategies, protect information from threats, implement information technology solutions, and design and build data communications networks (Thomas, 2015). Consequently, organizations view IT professionals as a vital, value-added component of the workforce who contribute to the smooth execution of organizational processes (Cerfontyne, 2020). Moreover, the IT function inside firms is highly specialized, necessitating a professional understanding of technology, their organization, and their business industry (Rockart & Delong, 1988; Smith & McKeen, 2005). IT leadership is linked to IT intelligence, which can shape corporate stability and creativity and is crucial to an organization's performance since it will align and coordinate to reach corporate goals (Hickman & Akdere, 2019). Therefore, it is critical for sustaining leadership and success (Anvari et al., 2014).

According to the grounded model of technology leadership quality, technology leaders must emphasize the needs and readiness of users (Chua & Chua, 2017) and be able to maintain a conducive culture among users (Albidewi, 2016). These leaders must also be able to implement relevant strategies to the ever-evolving nature of technology (Garcia, 2015). In addition, IT organizations must develop an adequate leadership culture to support non-linear development (Patrick, 2018). Transitioning from a technical to a leadership position is difficult, especially for IT and cybersecurity experts (Dzameshie, 2012; Lester & Tran, 2008; Rothenberger, 2016). These difficulties include possessing the social capital (people and soft skills) and leadership competencies to manage and lead non-technical staff (Brokett, 2007; Lester & Tran, 2008).

Lounsbury et al. (2007) examined the personality traits of 12,695 individuals that described their current profession as Information Technology. A work-contextualized personality measure was used to determine if these individuals exhibited different characteristics than those in other professions. Overall, the study's results indicated that the personality profile of IT professionals differed significantly from other occupations. For example, technology professionals had higher levels of agreeableness but lower levels of emotional stability and conscientiousness (Lounsbury et al., 2014).

According to research, skilled IT experts significantly impact organizational value creation, and skilled people are essential to an organization's success and ability to fulfill its strategic objectives (Harden et al., 2016). The growth of the IT industry has presented issues for IT firms looking to recruit and retain employees (Erturk & Vurgan, 2015). Given that a company's performance depends on human capital (Bhati & Manimala, 2011), talented people are viewed as a factor influencing a firm's growth and as having the ability to drive organizational innovation. On the other side, a lack of skills has resulted in excessive employee turnover, which is a problem for IT organizations. Meanwhile, some academics claim that empirical studies rarely use technology experts or technical Subject Matter Experts (SMEs) as a unit of analysis (Lee et al., 2014; Pare & Tremblay, 2007;). As a result, research into turnover, turnover intentions, and methods to reduce turnover of IT employees is a viable topic of study (Korsakienė et al., 2014). Hence, the exploration of turnover, turnover intentions, and means to diminish turnover of IT professionals are seen as promising areas of inquiry that have recently attracted researchers' attention (Korsakienė et al., 2014). Lacity et al. (2008) investigated the turnover intentions of IT professionals and concluded that job satisfaction, organizational culture, and social norms affect turnover intentions.

Researchers discovered that the "desire to move" aspect was the most frequently reported predictor of turnover intention in a meta-analytic assessment of Information Technology literature (Harden et al., 2018). A need to change positions is reflected in the level of organizational commitment, which assesses how much an employee participates in, identify with, and values his or her organization's culture (Harden et al., 2018). In addition, studies have shown that IT professionals are motivated by: (a) effective leadership, (b) healthy workplace relationships, (c) difficult work, (d) respect, and (e) work-life balance and dissatisfaction with workplace relationships and transformative leadership traits significantly contribute to technology employee turnover decisions (Abii et al., 2013; Chandler, 2004; Lock, 2003).

Transformational Leadership and Job Satisfaction Among Information Technology Professionals

Organizational commitment and job satisfaction constructs are based on previous ideas of workplace motivation (Maslow, 1943; Herzberg, 1965). Weiss et al. (1967) documented a definition of the intrinsic-extrinsic definition for job satisfaction. Intrinsic satisfaction is acquired through doing work and, as a result, feeling sentiments of accomplishment, self-actualization, and identification with the task (Martin & Roodt, 2008). Extrinsic satisfaction stems from job satisfaction (Weiss et al. 1967). This type of satisfaction is generated from benefits received from peers, managers, or the organization, which might take the form of advancement compensation or recognition (Martin & Roodt, 2008).

Transformational leadership and organizational culture change have been identified as possible answers to the issue of declining work satisfaction. The impact of transformative leadership on job satisfaction and associated dimensions has received considerable attention (Mesu et al., 2015; Top et al., 2015; Welty Peachey et al., 2014; Yahaya & Ebrahim, 2016;

Yucel et al., 2014). Flexible organizations that adopt participative management methods, stressing communication and employee motivation, are more likely to have satisfied employees, resulting in the organization's success (Mckinnon et al., 2003). According to Gill et al. (2010), transformational leadership directly impacts employee work satisfaction, impacting staff retention (Malik et al., 2017). In addition, transformational leadership aims to increase job engagement by directly appealing to followers' senses of meaning, engagement, and interest (Mesu et al., 2015; Top et al., 2015; Welty Peachey et al., 2014; Yahaya & Ebrahim, 2016; Yucel et al., 2014). As a result, transformational leadership is positively linked with the notions of organizational commitment and job satisfaction (Sow et al., 2017).

Talent retention in the IT industry is critical because the global labor market offers more employment alternatives for IT experts with a powerful proclivity to leave their organizations (Munro, 2015; Van Dyk & Coetzee, 2012). IT professionals are considered critical knowledge workers (Lumley et al., 2011) because they have specialized knowledge and abilities that are difficult to replace. Employees become committed due to transformational leadership (Carter et al., 2012). Furthermore, according to Gill et al. (2010), transformational leadership directly impacts employee work satisfaction, affecting staff retention (Malik et al., 2017).

The feelings of respect and loyalty among followers are valued by transformational leaders, who emphasize the need for a solid commitment to achieving organizational goals (Nasir, 2021). Put another way, intentional and idealized influence enables leaders to treat their followers respectfully (Veiseh et al., 2014). Furthermore, according to Warrick (2011), a transformative leader quickly adjusts to changes and provides opportunities for all levels of the business to grow, acquire current trends and information, and participate (Wells, 2017).

Modern leadership theories realize that achieving organizational goals require more than "give and take" (Mittal, 2015). According to Bass (1985) and Yukl (1989), organizational goals can regularly transcend expectations and rationality. Charismatic leadership theories explain how leaders persuade followers to prioritize the demands of the mission or organization over their own materialistic self-interests (Mittal, 2015). Various factors have influenced these definitions, including international affairs and politics and the discipline's perspectives on the subject (Cote, 2017).

Transformational leadership theory sets the foundation for studying specific traits and behaviors in executing and developing this leadership style in technology organizations. Leadership development should not be left to chance since solid leadership is vital for executing organizational transformation (Daft et al., 2017; Eich, 2012; Hladio & Edwards, 2017). Technology executives must have substantial people skills to persuade the Board of Directors and corporate officers that technology risks should be taken seriously (Burrell et al., 2018). These risks should be incorporated into the enterprise risk management calculus and weighed against human resources, financial, operations, and marketing priorities to obtain fiscal resources (Klimoski, 2016). These leaders also look to transformational leadership traits to create a sustainable retention strategy (Guha & Chakrabarti, 2014). Above all, for any retention strategy to be successful, mentor connections with leadership and peers must be established to increase emotional links to the organization and culture (Guha & Chakrabarti, 2014). Such familial bonds among the organization's employees establish a commitment to the organization because each person feels proud to be affiliated with the organization and their colleagues (Guha & Chakrabarti, 2014).

Bass (1985) indicates that charismatic and transformational leaders establish new cultures and meaning for their subordinates. The leader's values and views align with the followers' ideals, resulting in innovation, trust, and culture-building (Bass, 1985). Many behaviors have been uncovered throughout decades of research on leaders and managers (Bass, 1990; Yukl & Becker, 2006). However, as Yukl (2008) contends, scholars have had difficulty organizing the various behaviors into a hierarchical and valuable taxonomy for the behaviors' impact.

In Agarwal et al.'s (2011) model, IT leadership included designing the strategic IT plan, overseeing business process reengineering, comprehending emerging technologies, establishing electronic communication flows throughout the enterprise, and developing and maintaining highly competent IT people (Hickman & Akdere, 2018). According to McLean and Smits (2014), competent IT executives adopt transformational leadership because it allows organizational transformation, which improves the return on IT investment. In addition, in a study conducted by Bennett (2009) of 3,000 members of the Association of Information Technology Professionals (AITP), it was found that transformational leadership had the most substantial effect on a subordinate's willingness to put in extra effort and how satisfied they were with their leadership. By far, responders preferred to work for leaders that demonstrated transformational leadership traits (Bennett, 2009).

Leadership Within the Information Technology Sector

Recent research has highlighted the importance of IT leaders in influencing the contribution of technology skills in businesses, specifically their role as heads of technical human capital and their contribution to transforming IT from a pure backend service structure and cost center to a partner of business units and, eventually, an essential contributor to a firm's organizational benefits (Dinger et al., 2012; Li & Hung, 2009). An increasing amount of research

demonstrates that leadership favorably impacts performance from the standpoint of an organization (Agle et al., 2006; Waldman et al., 2004). Barrett (2006) postulates that organizational culture reflects the consciousness of its leaders and that cultural change begins with individual change. Leaders' unwillingness to acknowledge personal preconceptions, values, and habits can hinder creating "change solutions" as part of the organizational culture transformation process (Cekuls, 2015).

According to Kreisman (2002) and Ladelsky and Catana (2013), among the drivers contributing to employees voluntarily leaving a technology firm are a lack of respect for communication with a leader, an accumulation of resentment based on one or more triggering events, and some ongoing interaction with the leader who pushed the employee over the edge. In addition, according to Kappelman et al. (2016), managers who lack transformative and inventive leadership qualities are more likely to lose talent. Unfortunately, despite many studies on technology sector turnover over the preceding two decades, there is no symmetric appraisal of this topic for a standard comprehension of the phenomenon's accumulated information (Guha & Chakrabarti, 2014).

Charles Lugor (2019) investigated how transformational leaders develop trust within virtual teams in technology businesses through a qualitative case study. A geographically diverse sample of ten technology team leaders was chosen for semi-structured interviews and an open-ended questionnaire focusing on leadership style (Lugor, 2019). The specific topic covered in this qualitative case study was a lack of awareness regarding the impact and efficacy of transformational leadership in IT businesses (Lugor, 2019). The data analysis revealed four themes: project success, decision-making, group development, and performance enhancement (Lugor, 2019). Furthermore, the participants' narratives included all of the variables from the

research question, such as transformational leadership traits, talents, motivation, and training methodologies (Lugor, 2019).

Because CEOs must deal with fast-paced industry changes while executing strategic goals, leadership, particularly transformative leadership, is becoming increasingly important in the modern digital era (Cerfontyne, 2020). Highlighted in a growing body of studies in South Africa, the position becomes more complex as leaders face distinct challenges, including employees' heavy workload, long working hours, and unrealistic deadlines (Cerfontyne, 2020). The companies also frequently lack resources due to a deficiency of skills required to perform in this demanding environment (Cerfontyne, 2020). Hickman and Akdere (2018) also argue that the technology industry is critical because of the industries it creates and disrupts and the potential growth impact on firms. As a result, emergent and transformational leadership are vital for the technology sector's long-term viability (Hickman & Akdere, 2018).

According to a study on technology professionals and leadership, there is a significant gap in teaching technical specialists the skills to acquire leadership roles due to a lack of leadership development programs for cybersecurity and information technology workers (Burrell et al., 2018). In addition, most leadership development activities focus on developing training programs to address the rising cybersecurity talent shortage, with little consideration given to developing future leaders (Burrell et al., 2018). In today's business context, cybersecurity and information security specialists must have the necessary leadership and management skills to drive the enterprise's information security processes (Burrell et al., 2018). However, according to Oltski's 2017 research, cybersecurity and information technology professionals are severely underprepared for leadership roles, showing that cybersecurity does not receive adequate support from the executive suite (Burrell et al., 2018).

Technical roles do not place a high demand on people skills. Instead, they rely on aptitude, decision-making, and team-building. Leadership positions require people skills, decision-making, and team building (Burrell et al., 2018). By considering their individual needs, soft skills help followers feel empowered (Burrell et al., 2018). These characteristics also allow leaders to foster innovation and change while motivating staff, impacting job satisfaction (Zhu & Akhtar, 2013). According to Elkordy (2013), there is a positive relationship between transformational leadership and organizational culture, which is supported by a large body of empirical research (Dumdum et al., 2002; Rabie et al., 2016; Golden & Shriner, 2017; Rizki et al., 2019). Furthermore, organizational culture and leadership are two sides of the same coin, and culture influences leadership as much as leadership influences culture, implying that new behavioral patterns can be learned through observation or direct experience (Chong et al., 2018).

Theoretical Framework: Organizational Culture

Organizational culture is the underlying component of how people interact and can explain why a company, such as a technology business, succeeds or fails to fulfill its objectives and goals (Schein, 2004). Organizations often have very different cultures and subcultures (Deal & Kennedy, 1982; Kotter & Heskett, 1992; Schein, 2004). Successful leaders may use culture to generate innovation, strategy, and productivity (Burrell et al., 2018). A situational perspective is required to understand the link between culture and leadership style, suggesting that culture influences a leader's behavior (Welty Peachey et al., 2014). The technology organization's culture will shape its leaders (Welty Peachey et al., 2014).

Research on organizational culture has its roots in anthropology (Ostroff et al., 2012). It is influenced by qualitative approaches such as participant observation, interviews, and historical data analysis to understand how culture provides a context for understanding individual, group,

and societal behavior (Ostroff et al., 2012). For example, employee attitudes, behavior, and performance have been studied since the 1930s using participant observation and employee interviews (Ostroff et al., 2012). Gardner's textbook, Organizations from a Cultural Perspective (1945), used observation and interviews in its approach. Nonetheless, from the 1940s through the early 1960s, interest in using an anthropological method to investigate labor organizations decreased (Ostroff et al., 2012). While anthropologically based studies experienced a renaissance in the 1960s (Trice et al., 1969) and 1970s (Weick & Mintzberg, 1974), organizational culture did not become a prominent study area until the 1980s (Barney, 1991; Alvesson & Sveningsson, 2016).

In 1951, Jaques explored organizational cultural themes in the manufacturing industry in England in his book "The Changing Culture of a Factory: A Study of Authority and Participation in an Industrial Setting," which discussed various organizational culture issues from a commercial perspective. Formal writing on culture began with Pettigrew (1979) as "the system of such publicly and accepted meanings operating for a given group at a given time" (Elkordy, 2013). Denison and Mishra (1995) found that in the early 1980s, organizational culture theory covered organizational behavior and social science fields like anthropology, sociology, and social psychology (Pathiranage et al., 2020). Peters and Waterman identified the features of organizational culture in high-performing corporations in 1982, profiling 46 outstanding American corporations based on their organizational culture (Pathiranage et al., 2020).

In 1985, Schein demonstrated the relevance of organizational culture in terms of organizational performance by dividing it into three components: assumptions, artifacts, and values. Assumptions are unwritten but crucial norms in the workplace (Schein, 1984). The visible parts of organizational culture, such as work processes, workplace settings, and

organizational structures, are represented by artifacts (Schein, 1984). Finally, values are the members of an organization's values and business approach (Schein, 1985). These three factors help establish a positive organizational culture (Schein, 1984). In 1992, Kotter and Heskett studied more than 200 companies in the United States and discovered a substantial link between organizational culture and financial success. Schein (2010) hailed Kotter and Heskett's 1992 study as a fundamental work in organizational culture (Pathiranage et al., 2020).

Hofstede's (2011) cultural aspects theory is another foundational framework. He claims that culture comprises unwritten socialization rules (Hofstede, 2011). The mind's collective programming separates one group from another (Hofstede, 2011). Hofstede's cross-national studies show that organizational and national cultures differ (Mamatha & Geetanjali, 2020). Warrick (2017) documented that studies on organizational culture post-1980 highlighted culture as having a significant impact on performance, morale, job satisfaction, employee engagement and loyalty, employee attitudes, and motivation (Denison & Mishra, 1995; Fisher, 2000; Marcoulides & Heck, 1993; Rollins & Roberts, 1998).

Dempsey (2015), like Avota et al. (2015), claimed that values were critical factors in the long-term viability of the organizational culture. According to Dempsey (2015), values are the sum of an organization's ideas, attitudes, and perceptions that support the formation of its culture. Ruiz-Palomino and Martnez-Caas (2014), Schein (2010), and Uddin et al. (2013) consent that organizational culture can be formed from various sources, including the founders' ideals and assumptions and members' learning experiences.

According to scholars, leaders, and practitioners, organizational culture is a complicated and challenging topic for firms, mainly due to the difficulty in assessing their internal culture and implementing the needed changes (Muratović, 2013). However, it emphasizes the importance of

organizational culture in its dynamics (Muratović, 2013). Aydin (2018) defines leadership as an individual's or an organization's ability to "lead" or guide other individuals, teams, or entire organizations. Leadership permits the organization to adapt to its circumstances by discarding unproductive behavior patterns and replacing them with new ones, benefiting leaders in IT professions. Organizational leaders also provide counsel, support, and assistance to help the organization achieve its objectives. Regardless of industry, leaders are necessary for any organization's success (Taylor et al., 2014).

Culture may promote successful leaders' creativity, strategy, and productivity; however, Burrell et al. (2018) state the need for ongoing management and development, both theoretical and practical. Aryani and Widodo (2020) and Colquitt et al. (2015) posit that organizational culture is interpreted differently. However, a common base definition is a social understanding shared by members of the organization, such as rules, norms, and guidelines that confirm organizational members' attitudes and behaviors. Schein (2014) reaffirms the notion that organizational culture is a set of shared values and a collection of assumptions, beliefs, and values. Despite leadership's influence on employees, leaders have also used their methods to influence organizational culture and objectives (Totterdill & Exton, 2017; Volini, 2019).

Culture can adapt to shifting possibilities and needs flexibly and autonomously. Unlike strategy, which the executive suite often establishes, culture can fluidly integrate top leaders' intents with frontline employees' expertise and experiences (Groysberg et al., 2018). As a result, culture can help powerful CEOs support technical innovation, strategy, and productivity (Burrell et al., 2018). A recent poll found that 15% of respondents were completely disengaged from their company, up from just 6% in 2020, with 15% citing poor relationships with their leadership as the main driver for feeling disconnected (Baumgartner, 2020). These poll results align with the

literature's research on the need for leadership training programs for technology professionals (Burrell et al., 2018).

Existing research indicates that organizational culture impacts IT professionals' job satisfaction and commitment (Guha & Chakrabarti, 2014; Lugor, 2020; Tang et al., 2015). High-tech industries operate in a world of three sorts of uncertainty: market uncertainty, technological uncertainty, and competitive volatility (Naqshbandi et al., 2015). An organizational culture fosters employee growth, harmony, customer focus, social responsibility, and innovation to build employees' necessary competencies, attitudes, and work behavior (Naqshbandi, 2015). Schein (1992) identified organizational diversity based on worker occupational profiles. As a result, an organizational culture that contributes to excellent organizational outcomes must contain features that complement the organization's primary business (Groysberg et al., 2018). Therefore, the typology used to assess organizational culture should capture industry-specific organizational culture (Groysberg et al., 2018).

According to Deal and Kennedy (1982), culture is believed to be the most critical factor accounting for the success or failure of an organization. Tang et al. (2015) concur with Deal and Kennedy that organizational culture naturally influences employee behavior and overall organizational activities. In addition, Tsai (2011) states that because of the pervasiveness of organizational culture, management must understand its underlying dimensions and overall impact on employee-related factors, including job satisfaction, organizational commitment, and performance.

In today's corporate environment, IT plays an active role in helping organizations gain a competitive advantage (Lam et al., 2021). Researchers have investigated the effects of IT on various aspects of business and across multiple industries, establishing IT as a strategic factor in

enterprises (Arora & Rahman, 2017; Lam et al., 2021; Li & Chan, 2019). Utilizing information technology to control critical business processes and enhance company performance has been a top priority for businesses over the past decade (Wu et al., 2006; Liu et al., 2014; Lindgreen & Di Benedetto, 2018). Gaining new information and knowledge has significantly impacted industrial growth and has necessitated and permitted new economic structures, social revolutions, organizational cultural transformations, and labor paradigms (Cascio & Montealegre, 2016).

Technology organizations that employ the Organizational Culture Model practice three stages of culture based on people's basic assumptions, professed beliefs, values, artifacts, and creations like visible and audible behavioral patterns (Schein, 1984). Schein (1983) highlighted the importance of organizational culture while consulting for the Digital Equipment Corporation. He observed that the founder contributes to the company with their specific interests, views, and ideas on better serving the existing market or developing a new market, which drives its culture, material structure, and practices (Lewis, 2019). Management can use values as a subtle tactic to influence others and promote specific values to build associated norms for expected conduct (Schein, 1984). Managers can then build an organizational culture that has a significant and persuasive effect on employee behavior (Schein, 1984). Finally, artifacts (such as organizational rituals, language and narratives, and physical arrangements) can represent values and norms, leading to desired behaviors such as creativity and innovation (Schein, 2004).

Culture is essential in determining whether a technology organization or any firm succeeds or fails (Naranjo-Valencia et al., 2016). For example, if a technology company wants to hire bright people, it must now focus on creating a positive work environment and a substantial organizational culture (Tran, 2017). Successful technology transformation does not happen by

chance; it is not biological or self-propelled. Instead, it necessitates careful attention to detail and meticulous planning, starting with a candid, unblinking evaluation of culture (Naranjo-Valencia et al., 2016). Transformational leaders study their organizations' cultures before realigning them with a new vision and modifying shared assumptions, beliefs, and norms (Bass & Avolio, 1993).

Onday (2016) discussed that until the early twentieth century, scientists and scholars focused on understanding how organizations work. As a result, organizations, like the ideas that define them, have developed into nine "schools" of organizational thought (Shafritz et al., 2016).

Table 2

Organizational Culture Theories, Seminal Works, and Authors

Theory/Seminal Work	Author(s)/Year
Classical Organization Theory - "Notes on the Theory of Organizations"	Luther Gulick, 1937
Neoclassical Organization Theory – "The Functions of the Executive"	Chester Barnard, 1938
Human Resource Theory (Organizational Behavior Theory) – "The Giving of Orders	Mary Parker Follett, 1926
Modern Structural Organization Theory – "Formal Organizations: A Comparative Approach"	Peter Blau & Richard Scott, 1962
Organizational Economics Theory – "The Economics of Organization: The Transaction Cost Approach"	Oliver Williamson, 1981
Power and Politics Organization Theory – "Power in and Around Organizations"	Henry Mintzberg, 1983
Theories of Organizational Culture and Change – "Organizational Culture and Leadership"	Edgar Schein, 2004
Theories of Organizations and Environments – "The Social Psychology of Organizations"	Daniel Katz & Robert Kahn, 1966
Theories of Organizations and Society – "Gendering Organizational Theory"	Joan Acker, 1992

Adapted from "Classics of Organization Theory" by Shafritz et al., 2016, Cengage Learning.

Historically, the concept of climate came before the concept of culture. The social background of the work environment, known as "climate," was examined as early as 1910 (Hollingworth & Poffenberger, 1917; Munsterberg, 1928). The term “organizational climate”

was formally established in the 1960s, primarily based on Kurt Lewin's theoretical principles (Lewin et al., 1939; Lewin, 1951), and was followed by actual study (Litwin & Stringer, 1968; Stern, 1970). Organizations were studied from a cultural standpoint as early as the 1930s (Trice & Beyer, 1993). However, organizational culture did not become an essential topic of research in management literature until the 1980s, and scholars examined the critical role culture plays in the success of organizations (Deal & Kennedy, 1982; Peters & Waterman, 1982; Schein, 1985). Although, as Kotter and Heskett (1992) have documented, successful companies have strong cultures, and these companies struggle when the requirements of the competitive world demand that they change the norms and behaviors that built the foundation (Euchner, 2017).

In previous research, organizational culture and motivation have been emphasized almost equally (Maseko, 2020). This phenomenon is attributable to the widespread recognition that these two elements impact the individual employee's performance and the organization's overall effectiveness, performance, and sustainability (Maseko, 2020). The concept that culture influences behavior, decision-making, business strategies, and individual and organizational performance has sparked interest in organizational culture (Arora & Rahman, 2017; Maseko, 2020). According to Arifin (2014), organizational culture influences organizational behavior far more than orders from top management and can hinder strategy implementation if it differs from its culture (Maseko, 2020).

Scholars agree that culture and information technology practices are inextricably linked (Doherty & Doig, 2003; Huang et al., 2003). Researchers have examined culture and information technology at many levels of analysis (Erez & Gati, 2004; Karahanna et al., 2005) but very little on leadership styles and their effect on organizational culture. Several studies link company culture to IT success (Schein, 2003). In the last twenty years, the IT field has seen increased

interest in the effects of organizational culture on job satisfaction and turnover intentions (Dasgupta & Xiao, 2005).

Organizational Culture Drivers

The organizational culture drivers that influence transformational leadership include behaviors (Ertosun & Adiguzel, 2018; Schein, 2004;), control systems (McGregor, 1960; Schein, 2004), and symbols (Schein, 2004). Beyond formal control systems, processes, and authority, an organization's culture considerably influences, and as a result, an organizational culture is an effective tool for eliciting desirable outcomes (Hogan & Coote, 2013).

Culture strongly influences how members see, think, and feel; these predispositions and situational conditions determine how they act (Schein, 2004). Therefore, culture will be adhered to even if it becomes dysfunctional regarding environmental opportunities and limits because it offers a crucial anxiety-relieving function (Schein, 2004). Furthermore, by overlaying organizational values with individual values, organizational culture promotes employees' sense of identity and belonging (Ertosun & Adiguzel, 2018). It also affects desired organizational behaviors (Ertosun & Adiguzel, 2018). On the other hand, individual employee values, beliefs, expectations, attitudes, behaviors, and actions are critical contributors to forming and embracing company culture (Ertosun & Adiguzel, 2018).

As McGregor (1960) noted many decades ago, assumptions about human nature become the foundation of management and control systems. These systems self-perpetuate because if people are treated consistently in certain basic assumptions, they will eventually behave in ways that conform to those assumptions to keep their world stable and predictable (Schein, 2004). How influence, power, and authority will be distributed is a vital question in forming any new group (Schein, 2004). Human stratification is often not as overt as animal societies' dominance-

establishing rituals (Schein, 2004). Still, it is analogous to establishing workable rules for controlling aggressiveness and mastery requirements (Schein, 2004). Pecking orders evolve in human societies like chickens, but the process and the results are significantly more complex and variable (Schein, 2004).

Mamatha and Geetanjali (2020) posit that the strategy chosen is impacted by the founder leaders' value system, which may be linked to the organization's professed values, impacting organizational culture. Organizations create sub-cultures and overarching cultures as they grow and mature (Mamatha & Geetanjali, 2020). The nature and diversity of such subcultures will impact the organization's ability to innovate (Mamatha & Geetanjali, 2020). However, suppose an organization has enough various sub-systems with their diverse sub-cultures - it can innovate by elevating people and ideas from those sub-cultures that are the most dissimilar from the "parent" but most adaptable to a changing environment (Schein, 1988).

As documented in Schein (2004), organizations' methods to characterize themselves may or may not be acknowledged consciously. Still, they become embodied in structures, office layouts, and other material artifacts of the group, known as "root metaphors" or integrating symbols (Schein, 2004). In addition, members' emotional and aesthetic responses are reflected at this level of culture instead of their cognitive or evaluative responses (Gagliardi, 1992; Hatch, 1993; Schultz & Hatch, 1996).

Numerous pieces have been written about the superficial symbols of organizational culture. Most studies use slogans, organizational systems, or institutions as symbols, while others, such as Schein, use behavior patterns to account for this element (Xiaoming & Junchen, 2012). Unfortunately, even though organizational culture symbols are apparent, they are frequently incomprehensible (Schein, 1983). It has been noted throughout the evolution of

corporate culture that culture is not a surface phenomenon. Instead, it is imbued with symbols and symbolism (Druckman et al. 1997) and is undetectable to most employees (Cameron & Quinn, 2011).

Chief Information Officers (CIOs) are tasked with leading and aligning internal and external technology professionals with organizational business goals. Cultural change necessitates CIOs first discover and then redefine their businesses' underlying beliefs—an undertaking that can be far more complicated than introducing new technologies (Kappelman et al., 2016; Kark, 2019). Developing a high-performing IT culture is a deliberate and continuing activity involving diligence, an informed approach, and regular monitoring (McLean & Smits, 2014) and allows for a competitive edge

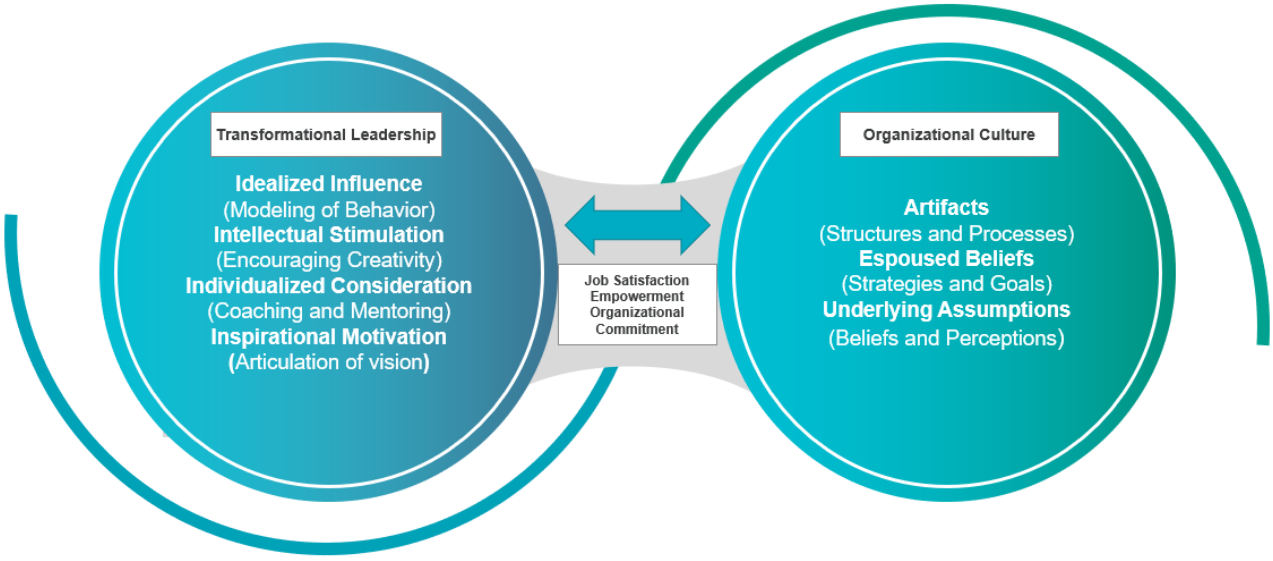
Schein (1992) identified organizational diversity based on worker occupational profiles. Thus, an organizational culture that contributes to favorable organizational outcomes must include elements that complement the organization's primary business (Naqshbandi et al., 2015). This implies that the typology used to assess organizational culture should be capable of capturing industry-specific organizational culture (Naqshbandi et al., 2015). Existing IT research suggests that organizational culture impacts IT organizations (Harper & Utley, 2001). However, there has been minimal research into how organizational culture affects IT companies (Scholarios et al., 2008). In these settings, encouraging people to do their best work is a big problem for IT businesses (Nohria et al., 2008). Understanding the elements that keep technology professionals engaged is thus a critical task for IT firms (Messner, 2013).

Intersection of Transformational Leadership and Organizational Culture

As shown in Figure 8, Karaminia, Salimi, and Amini (2010) found a direct link between transformational leadership style and organizational culture while researching the relationship between leadership style, culture, and organizational commitment in the armed services. Studies on the correlation between leadership and culture (Xenikou & Simosi, 2006; Chang & Lee, 2007; Nam Nguyen & Mohamed, 2011) looked at the combined effects on organizational characteristics like performance, knowledge management, continuous learning, and work satisfaction (Kargas & Varoutas, 2015). In addition, Li (2004) investigated the relationship between transformational leadership styles and job outcomes in bureaucratic, innovative, and supportive organizational cultures, while Kwantes and Boglarsky (2007) investigated the relationship between organizational culture and leadership and personal effectiveness, revealing solid and statistically significant relationships (Kargas & Varoutas, 2015). When examining the influence of leadership on the establishment of organizational changes, culture is identified as the primary component created by transformative leaders and is critical to the sustainability of organizations (Veiseh et al., 2014).

Figure 1

The intersection of transformational leadership traits and organizational culture drivers



Adapted from "Leadership: Good, better, best", by B. Bass, 1985, *Organizational Dynamics*, 13(3) and "Organizational Culture and Leadership", by E. Schein, 2004, 3rd ed., Jossey-Bass.

An essential aspect of transformational leadership in organizations is to influence the values, beliefs, and behavioral expectations of organizational members; therefore, leaders devote significant effort to the maintenance, development, and transformation of organizational cultures (Bass & Avolio, 1993; Trice & Beyer, 1993; Waldman & Yammarino, 1999; Xenikou & Simosi, 2006; Berson et al., 2008; Schein, 2004; Hartnell & Walumbwa, 2011). Organizational culture moderates transformational leadership, employee commitment, and engagement (Golden & Shriner, 2017). Subordinates can interpret leaders' actions as indicative of organizational purposes (Levinson, 1965). Transformational leaders build a vision, foster corporate pride and a sense of belonging, and explain the significance of participation in the organization, helping employees internalize organizational principles (Bass, 1985). Transformational leadership fosters an emotional bond between a leader and his or her followers and high levels of trust (Tse & Lam,

2008). Consequently, leaving the organization could be costly for followers since they may not choose to terminate this quality relationship (Burton & Peachey, 2014).

Adaptive and transformative company culture has become increasingly important in today's dynamic world (Bass & Avolio, 1993). These cultures are more of a focus in today's ever-changing world (Rijal, 2016). According to previous studies, transformational cultures positively associate individual and organizational outcomes (Kavanagh & Ashkanasy, 2006; ElKordy, 2013; Golden & Shriner, 2017). Therefore, transformational leaders who demonstrate their understanding of the company's goal to their followers will be able to push themselves to attain the company's mission, this action will become a system, and all members of the organization's behavior will become organizational culture (Rahman & Kholidi Hadi, 2019).

In addition to transformational leadership, organizational culture impacts employee motivation and satisfaction (Putra & Dewi, 2019). According to Mahal (2009), organizational culture is positively associated with job motivation, and leaders must develop their organizational culture to increase employee motivation (Putra & Dewi, 2019). Researchers have found that a positive corporate culture has a favorable and significant impact on job motivation and satisfaction (Pramudjono, 2015; Tobing & Syaiful 2016; Anra & Yamin, 2017; Krisnanda & Surya, 2019). According to research by Radakovich (2016), a positive organizational culture that supports job motivation can help organizations increase satisfaction.

Schein (1992) claimed that successful knowledge management practices should be incorporated into the company culture to promote innovation. Organizations with a strong culture of adaptation to technological, market, and commercial changes have a 70% chance of surviving (Rezaei et al., 2012). According to Chang and Huang (2005), knowledge drives human resource practice. It advocates the breed of innovative and technologically advanced products

and services, innovative culture, and transformational leadership (Bass, 1999). Transformational leaders who build on trustworthiness and purpose assumptions and feel that all followers contribute uniquely will create a highly innovative and satisfying business culture (Bass, 1999). Leaders who create and communicate such cultures to their followers also have a clear vision and purpose (Avolio et al., 1999).

According to Veiseh et al. (2014), the concept of transformational leadership significantly impacting organizational culture is a newer paradigm. Several studies on business culture and transformative leadership found a clear link (Veiseh et al., 2014). According to the study's findings, hopeful influence, inspirational motivation, and personal observations impact organizational culture (Veiseh et al., 2014). Researchers have explored the impact of transformative leadership and organizational culture on two key outcomes: employee job satisfaction and organizational commitment (ElKordy, 2013; Rijal, 2016; Lee & Cho, 2018: Al-Shibami et al., 2019). Research has also investigated the long-standing link between leadership styles, work satisfaction, organizational performance and commitment (Rizki et al., 2019; Paais & Pattiruhu, 2020; Suprapti et al., 2020)

Several studies (Day & Lord, 1988; Hunt, 1991; Jacobs & Jaques, 1987; McCalister et al., 1967; Törnblom, 2018; Zaccaro, 1996) have revealed leadership discrepancies between organizational types, which Kaiser and Craig experimentally tested in 2011. Furthermore, Katz and Kahn's (1978) three distinct leadership domains include system, organizational, and direct, emphasizing that the qualitative character of leadership has affected numerous views. Finally, Transformational Leadership Theory is associated with improved organizational outcomes, employee engagement, and job performance, which benefit businesses significantly (Buil et al., 2019).

Transformational leadership has proven to be the most effective in terms of employee happiness and other results when it comes to leadership styles (Mesu et al., 2015; Top et al., 2014; Welty Peachey et al., 2014; Yahaya & Ebrahim, 2016; Yucel et al., 2014). Burnes (2006) polled 52 IT professionals, both Generation X and non-Generation X and found that poor communication with leadership significantly contributed to voluntary employee turnover among Generation X IT workers. In technical companies' organizational structure, job position and teamwork climate are crucial elements (Crespi-Vallbona & Mascarilla-Miro, 2018). Their one-of-a-kind functional design explains that it is not unexpected that autonomy, responsibility, significance, and significance to the firm, as well as the consolidation of a genuine collaborative atmosphere, are essential to IT employees (Crespi-Vallbona & Mascarilla-Miro, 2018).

The literature on transformational leadership, organizational culture, and affective commitment suggest that transformational leadership directly or indirectly impacts organizational culture (Lee & Cho, 2018). For example, charisma, a subfactor of transformational leadership, has been shown to impact hierarchical culture significantly, inspirational motivation has a considerable effect on clan culture and hierarchical culture, and individualized consideration substantially impacts clan culture and hierarchical culture (Lee & Cho, 2018). The predominant organizational culture frameworks contain culture dimensions with broad thematic similarities that focus on task-oriented and relationship-oriented values, consistent with the theoretical themes underlying organizational culture and the meta-themes found in the leadership literature (Hartnell et al., 2016).

Organizational culture is of tremendous interest to researchers, academics, businesses, and executives since it significantly impacts performance (Al-Shibami et al., 2019). Because culture engages and motivates employees, leaders must demonstrate a robust company culture to

impact their personnel's work attitude and performance (Simoneaux & Stroud, 2014). In addition, organizational culture is one of the elements that substantially influences innovation (Büschgens et al., 2013; Lin et al., 2012). Since organizational culture influences employee conduct, it may lead staff to accept innovation as a fundamental value of the firm and to become more invested in it (Hartmann, 2006).

Previous research has shown empowerment, work engagement, and trust as critical determinants of innovative work behavior and the impacts of transformational leadership (Li et al., 2019). When leaders establish a psychologically secure workplace, a culture of psychological ownership and involvement emerges (Dollard & Bakker, 2010). Employee engagement is enhanced by how an individual feels satisfied and excited about work-related activities (Nasomboon, 2014). From a different perspective, some academics emphasize the significance of leaders' roles in cultural development (Groysberg et al., 2018). For example, Brooks (1996) asserted that leaders use their understanding of organizational culture to effect change, but Chodkowski (1999) found that leaders' behavior influences followers' perceptions of corporate culture. Block (2003) found that immediate supervisory leadership is highly linked to employees' cultural perceptions, but he did not find a link between transformational and transactional leadership and unique cultural aspects. Furthermore, Torpman (2004) noted that leadership becomes a component of organizational culture and is integrated into the everyday organizational routine, whereas Taormina (2008) and Kargas and Varoutas (2015) investigated whether leadership behaviors are predictors of organizational culture.

Organizational culture is a predictor of company success (Joseph & Francis, 2015) and a determinant of organizational performance (Deshpandé & Farley, 2004). The growing importance of the global economy and the number of multinational firms make it worthwhile to

investigate how they accomplish such tremendous success (Zhang & Tansuhaj, 2007). Existing IT research indicates that organizational culture impacts IT organizations (Harper & Utley, 2001). However, there has been minimal research into how organizational culture affects IT companies (Scholarios et al., 2008). In these settings, encouraging people to do their best work is a big problem for IT businesses (Nohria et al. 2008). Therefore, understanding the elements that motivate people is a critical task for IT firms (Messner, 2013).

Chapter Summary

Seminal literature from Bass (1985), House (1976), Burns (1978), Yukl (1989), and Avolio and Bass (1993) highlighted the various attributes and traits of transformational leadership to support the literature review's research focus. Additional references supported leadership in the context of the technology sector and the perceived effects of different behaviors and traits on technology professionals.

Core literature on organizational culture came from Deal and Kennedy (1982), Schein (1985), and Kotter and Heskett (1992). The findings in Chapter 2 supported the idea that transformational leadership traits and organizational culture drivers can impact behavior and job satisfaction among information technology professionals. There is also growing interest in researching the influence of leadership styles and traits on organizational culture for technology professionals (Sürücü & Yeşilada, 2017). Organizational culture is crucial for forecasting organizational success, and technology professionals are instrumental in creating a competitive advantage for companies. In order to improve organizational performance in a complex and competitive business environment, executives must foster a culture that cultivates innovation and promotes open communication and mentorship. This study will be a significant step forward in empirical support of an innovative culture that fosters IT and performance.

The contribution to the body of knowledge on transformation, culture, and job satisfaction was focused on leadership traits and their influence on organizational culture. The literature review provided insight concerning the necessity of leadership's initiative and guidance in transforming culture and influencing information technology professionals. Chapter 3 will address the methodology for a qualitative approach in further examining transformational leadership traits and the effect on technology professionals and organizational culture within the information technology vocation.

Chapter 3: Methodology

Introduction

This chapter specifies the study design and provides a complete overview of the procedures utilized to investigate the central research inquiry. This study is an example of qualitative research employing an interpretive inquiry and paradigm, preferred for research in Information Technology (Iivari, 2018; Klein & Myers, 1999; Walsham, 1995). The area of study for this interpretive research analysis was how technology professionals perceive leadership traits and how these traits augment job satisfaction. The primary research question addressed by this study is:

RQ: What transformational leadership traits enhance technology professionals' job satisfaction?

A clear or established set of philosophic premises in the form of one of the more well-known qualitative methodologies will not influence this study (Kahlke, 2014). To develop cyber resilience, leaders should be aware of the collection of organizational values when creating a vision that motivates followers (Cleveland & Cleveland, 2018). These leaders can use incentives to shape people's actions and inspire them to develop a cybersecurity culture. Bass (1988) states that an inspiring leader has knowledge of and sensitivity to address issues, and a motivating leader provides guidance rather than micromanages and compels others to follow. Above all, inspiring leaders support others in their organizations (Cleveland & Cleveland, 2018). These leaders can employ a motivating vision and an incentive system in the cybersecurity and information technology sectors (Hult & Sivanesan, 2014).

Research Process

Before data collection, the study received Institutional Review Board (IRB) approval. Approved consent forms were presented to potential participants, outlining the assurances of confidentiality and anonymity, the study's voluntary nature, and any risks. In addition, a documented approved protocol with participants. Alpha-numeric identifiers were used in place of participants' names to ensure confidentiality.

The site for the proposed research study was U.S.-based IT professionals. Information Technology is critical to an organization's performance since it aligns and coordinates its efforts to meet its objectives. Several scholars have recommended future research on leadership and organizational culture across a variety of industries (Gomez, 2012; Kavanagh & Ashkanasy, 2006; Sicora, 2015), with Berglund (2014) highlighting a specific need for research on employee experience of perception of leadership (Deveaux, 2020).

This study utilized purposive sampling to interview 22 current information technology professionals as participants are more likely to provide insight into the phenomenon being examined based on their position, experience, or identity markers (Saldaña & Omasta, 2018). The purposive sampling method also offers a nonrandom technique that does not require underlying ideas or a pre-determined number of participants (Creswell et al., 2007). Instead, the researcher determines what needs to be understood and seeks out persons who can and are interested in providing the information through knowledge or experience (Creswell et al., 2007). The selected sample size was large enough to sufficiently describe the phenomenon of interest and address the research questions without having redundant data.

250 U.S. technology professional connections on LinkedIn were selected who met the participation requirements and divided into groups of 50. The first 50 were contacted via

LinkedIn over two days and asked to participate. Of those 50, 23 did not respond; five initially responded yes but could not participate due to scheduling conflicts, and 22 agreed and scheduled for 60-minute Zoom interviews within two weeks of initial contact. The target sample size of 20-25 was achieved within the first group of 50. Research participants are technology professionals previously defined as computer network and database management, information security, business software development, and computer tech support (Kumar, 2014). This description is further clarified to include cybersecurity analysts, technology product owners and implementers, data security and privacy associates, technology strategists, data management specialists, and technology leaders who drive technological innovation and transformation. (Bennett, 2009; Burrell et al., 2018; McLean & Smits, 2014).

Description of Research Participants

Twenty-two technology professionals were interviewed individually through semi-structured interviews. While using a guideline of pre-determined questions to drive the conversation, additional questions were asked based on responses. The participants worked across nine companies in various technology roles, both in leadership and non-leadership positions. Male (15) and female (7) technology professionals made up the study participant group. Professionals had varying levels of experience and lived across 12 U.S. states. Patterns emerged around years of experience and position level within the industry and were captured, although they were not qualifying factors for participation.

Table 3

Technology Professional Participants by Age and Gender

Group	n(N=22)

Age	20-30	4
	31-40	4
	41-50	10
	51-60	4
Gender		
	Female	7
	Male	15

Sampling Design

In a qualitative inquiry, the determination of the target population should focus on participants who can best share experiences and thoughts to address the qualitative research goal (Asiamah et al., 2017). In qualitative research, sampling is not done by formally choosing a subset of the target population. Instead, sampling is a method to compile empirical evidence to study the topic of interest in the most enlightening way possible by methodically choosing cases, materials, or occurrences. (Flick, 2018). Therefore, most qualitative sampling proposals revolve around a purpose (Flick, 2018) and saturation (Suri, 2011). Data saturation is the point at which more evidence gathering yields few additional topics, ideas, viewpoints, or data (Suri, 2011). For this study, saturation emerged at the 17th participant, but the researcher continued with five more participants to ensure the study captured all themes.

Data Collection Method

An in-depth interview with a subject is required to gather the necessary facts to investigate the lived experience, and such an inquiry produces linguistic data (Polkinghorne, 2005). In qualitative inquiry, the principal instrument for collecting data is the researcher. In semi-structured in-depth interviews, primary questions are the focus, and follow-up or clarifying questions are used as the discussion develops. An advantage of using the semi-structured interview method is the effective fostering of reciprocity between the interviewer and participant

(Galletta, 2013) and allowing the interviewer to improvise follow-up questions based on participant responses (Rubin & Rubin 2012, Polit & Beck 2010).

The exploratory, semi-structured interviews utilized a pre-distributed interview procedure. The semi-structured interviews with study participants were done freely and focused on the individual's experience with current and previous leadership experiences. The researcher explained the study's objective and told participants that participation is voluntary. And they were informed that they might revoke their consent to participate in the study at any time. Additionally, participants in the study were made aware that the data collection results would not be shared and that the gathered data would be de-identified to maintain confidentiality.

Data Analysis Procedures

Memoing was used during the semi-structured interviews to capture reflective notes about significant learnings from the data. The production of a record in the form of memos guarantees the preservation of thoughts, sentiments, and experiences, which may later become significant (Polit & Beck, 2020). Once all data is collected, some steps should be taken to ready the data for analysis. Numeric identifiers were assigned to all respondents to preserve the study's anonymity. The two fundamental subprocesses of data analysis are (1) data reduction and pattern recognition and (2) producing objective analytic findings and conveying those conclusions (Caudle, 2004). Coding is a crucial phase in the analysis process. Charmaz (1983) defines it as the process of categorizing and sorting data where codes serve to summarize, synthesize, and sort numerous observations derived from the data (Bryman & Burgess, 2002).

There are two approaches to analyzing data: Manually and technologically. Mason (1996) believes that, in practice, many researchers combine the two methods (Welsh, 2002). The video transcripts were uploaded and stored in this study using the qualitative analysis software Atlas.ti,

reviewed and updated to ensure accuracy. The first review of the data used in vivo coding. In vivo codes (codes based on the actual words spoken by the participants) can give imagery, symbols, and metaphors for rich category, theme, concept, and assertion development, in addition to dynamic content for arts-based interpretations of the data (Saldana, 2014). Both inductive and deductive coding methods were applied, beginning with inductive.

The notes captured from memoing during the interview process were correlated and manually added to the transcript notes from each interview. Then, creating a data analysis spreadsheet with a column for each question per respondent, eight pre-determined codes (Table 2) were applied to search the raw transcription data using Atlas.ti and extracted a word list of how many times the respondents mentioned these codes.

Table 4

Inductive Codes

Code	Variations	Total
Trust	Trusting, Trusted. Trustworthy, Trustworthiness, Distrust	149
Collaborate	Collaboration, Collaborative	27
Influence	Influencing, Influential	22
Transparent	Transparency	17
Motivate	Motivational, Motivation	16
Transform	Transformation, Transformative	15
Mentor	Mentorship	15
Autonomy	Autonomous	10

Following the development of the codes, more nuanced categories were created through thematic analysis coding and grouping codes to support underlying ideas or themes. The goal of thematic analysis is to identify a saturated set of themes (Ando et al., 2014) and a meaningful compilation of findings that documents the structure, with the validity of the findings being the most important (Neuendorf, 2019). This method allowed the researcher to uncover common ideas and

unexpected outliers across questions and respondents. With this information, the study was able to build a model that identifies potentially innovative concepts and theories, noteworthy constructs, and areas for future studies.

Measurements and Instrumentation

Zoom interviews were the primary data collection device. Perception and experience of leadership traits, determinants of job satisfaction, and how employees experience their organization's culture can be complex, personal, and emotional. The ability to see non-verbal cues, including body language, facial expressions, and tone of voice, provided great value. Qualitative researchers utilize interview questions to elicit experiences, sentiments, and experiences with positive or negative aspects of perceived transformational leadership attributes, personal drivers for job satisfaction, and insights into corporate culture. After securing and reviewing the transcripts, the video recordings were removed.

The instrument (attached in Appendix B) focused on the participant's experiences relating to perceived leadership behaviors and traits, job satisfaction drivers, and experiences within an organization's culture at macro and micro levels. In addition, the identified respondents received an email request for participation and a participant consent letter (attached as Appendices A and C, respectively). Finally, sixty-minute Zoom interviews were scheduled at a convenient time and date for the participants and recorded with consent. Each interview lasted between 40 and 60 minutes, depending on the participant's responses and any unknown time constraints.

Reliability, Validity, and the Researcher's Bias

Researcher bias exists in this study because of the years the researcher has spent as a technology professional and previous knowledge of the interview participants. However, keeping

an audit trail of all research-related activities and data, including raw interview transcript files and audio recordings, confirmed the accuracy and reliability of the data collected as part of the study (Creswell & Miller, 2000). In addition, comparing different theories and perspectives along with the data and the researcher's developing "theory" were triangulated to determine whether there was a coherent justification for the themes (Creswell, 2014). These strategies have mitigated the researcher's bias.

The researcher must be capable of employing analytic techniques that derive meaning from the data and then represent it in conceptual terms (Speziale & Carpenter, 2011). Participants' direct quotes were used to ensure the study's reliability, support critical themes, and draw meaningful deductions. In addition, all recorded interviews created transcripts to ensure the accuracy of responses. The transcripts were manually reviewed and edited appropriately.

Using descriptive and interpretive validity methods, interviews with 22 participants, including protocols for consent, distinct and systematic data collection, transformation when required, transcription and editing, coding to organize critical information, and discovery of patterns and interpretation. Rich, contextual data resulted from the collection and manual analysis of responses. For example, the researcher employed manual coding to highlight the responders' keywords, themes, and feelings. In addition, information considered to be outside of or in addition to significant themes was included, boosting the study's credibility.

Ethical Considerations

IRB approval is required for any human subject research to protect the participants (Creswell, 2014). Participants may have felt uncomfortable sharing their organization's culture and experiences with their current leadership. As a result, each participant received a detailed explanation of the research project's objectives. The procedure was made available before the

interviews, and the participants were welcome to ask questions. The interview process, data gathering methods, validity, and dependability of the study addressed additional ethical issues (Creswell, 2014; Arifin, 2018; Pajo, 2018).

Summary

The research methodology employed for this study is a qualitative inquiry approach. The population consisted of 22 US-based technology professionals across the country employed by various companies recruited via the professional networking site LinkedIn. Interviews were recorded via Zoom teleconferencing technology, using semi-structured in-depth interviews. Data were categorized using memoing, inductive and deductive coding methods, and thematic analysis to categorize the data over six weeks. In addition, eight inductive codes highlighted common emotions and opinions. Complete data findings, further analysis, and detailed themes are in chapter 4.

Chapter 4: Data Analysis

This chapter discusses the information collected to the point of saturation to address the study question and presents the conclusions based on qualitative data analysis. This chapter contains a continuation of Chapter 1, which described the research problem, the purpose of the study, and the research question; Chapter 2, which described the findings of the literature review on patient discharge planning; and Chapter 3, which detailed the qualitative methodology used in the study. The study investigated what leadership traits and behaviors enhance job satisfaction and improve the perception of organizational culture among U.S. technology professionals. The core research question is:

RQ: What transformational leadership traits enhance U.S. technology professionals' job satisfaction?

The chapter is organized into four sections: (a) the sample description, (b) the demographics of the research participants, (c) the themes and patterns revealed during the analysis phase, and (d) the general conclusions taken from the collected data. This study's findings can give technology professionals a deeper understanding of how particular leadership traits and behaviors may enhance their job satisfaction and improve overall organizational culture.

Description of the Sample

Interviews were conducted with 22 technology professionals based in the United States. The respondents have different years and areas of technology experience; some have held leadership roles, while others did not. Participants ranged in age from 24 to 55, with a mode of 41. The respondents worked in technology consulting and industry technology positions from 12 different states. All 22 respondents were given pseudonyms, from P1 to P22, to protect the anonymity and privacy of the participants.

Demographics of the Sample

The research participants comprised a diverse group of individuals in age, experience, and technology roles, as illustrated below in Table 1. The 20-30, 31-40, and 51-60 age groups had four participants. The 41-50 age group had the most participants at ten. Gender was comprised of 15 males and seven females. Fourteen of the participants currently hold management positions, and eight do not. Total years of technology experience ranged from two to 33, with an average of 19.6 years. Four participants had between one and five years of experience, only one had between six and ten years, and two had between 11 and 15 years. Three research participants had three years of technology experience; six had 21-25 and 26-30 years of experience.

The area of technology focuses varied across the sample. Eight participants worked within security strategy, and two worked within data and privacy. The product owner, managed security services, and information security areas had three participants. Identity and access management, cloud security, and solutions architecture had one participant each. The respondents lived in 12 states across the U.S., as outlined in Figure 1.

Table 5

Research Participant Demographics

Codifier	I.T. Focus Area	Age	Gender	Currently in a Management Role	Years of I.T. Experience	State
P1	Information Security	46	M	N	29	CO
P2	Information Security	34	M	N	13	CO
P3	Product Owner	38	M	Y	24	DE
P4	Managed Security Services	35	M	Y	14	FL
P5	Security Strategy	51	F	Y	30	FL
P6	Managed Security Services	45	M	Y	25	GA
P7	Product Owner	42	M	Y	23	IL

P8	Security Strategy	24	F	N	2	IL
P9	Cloud Security	26	M	N	3	IN
P10	Security Strategy	24	F	N	4	IN
P11	Security Strategy	42	M	Y	29	MN
P12	Security Strategy	44	M	Y	23	MO
P13	Information Security	39	M	Y	25	OH
P14	Data and Privacy	50	M	Y	29	OH
P15	Security Strategy	45	M	Y	30	OH
P16	Data and Privacy	53	F	Y	9	OH
P17	Product Owner	55	F	N	33	OH
P18	Security Strategy	37	M	N	20	OK
P19	Identity and Access Management	43	F	Y	20	OK
P20	Managed Security Services	37	M	Y	20	TX
P21	Security Strategy	48	M	Y	25	TX
P22	Security Strategy	24	F	N	2	VA

Table 6

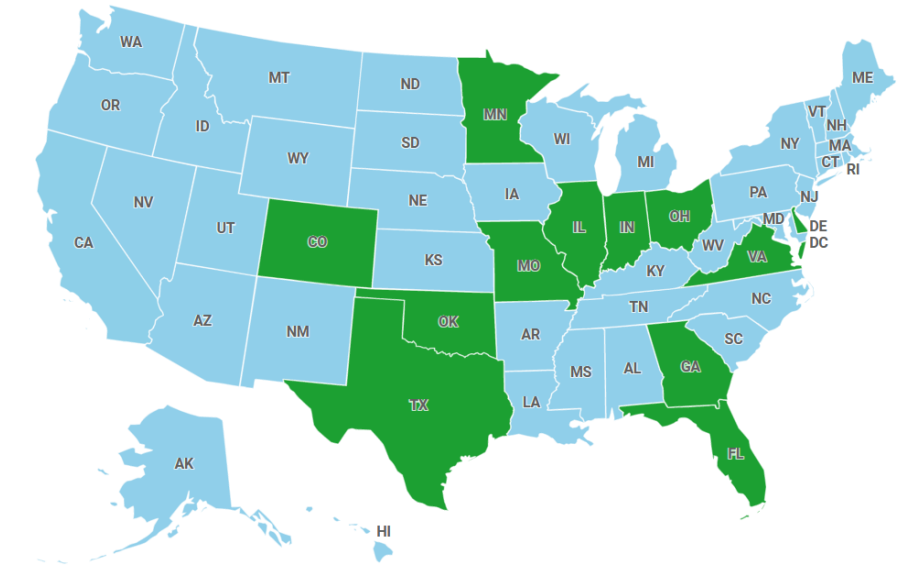
Research Participant Percentages

	Group	**n(N=22)**	**Percentage**
Age	20-30	4	18%
	31-40	4	18%
	41-50	10	45%
	51-60	4	18%
Gender			
	Female	7	32%
	Male	15	68%
Technology Focus Area			
	Product Owner	3	14%
	Managed Security Services	3	14%
	Security Strategy	8	36%
	Identity and Access Management	1	5%
	Cloud Security	1	5%
	Data and Privacy	2	9%
	Information Security	3	14%
	Solutions Architect	1	5%
Years of Experience			
	1-5	4	18%
	6-10	1	5%

11-15	2	9%
16-20	3	14%
21-25	6	27%
26-30	6	27%
Management Experience		
Y	14	64%
N	8	36%

Figure 2

Research Participants' States of Residence



Key:

Participant locations

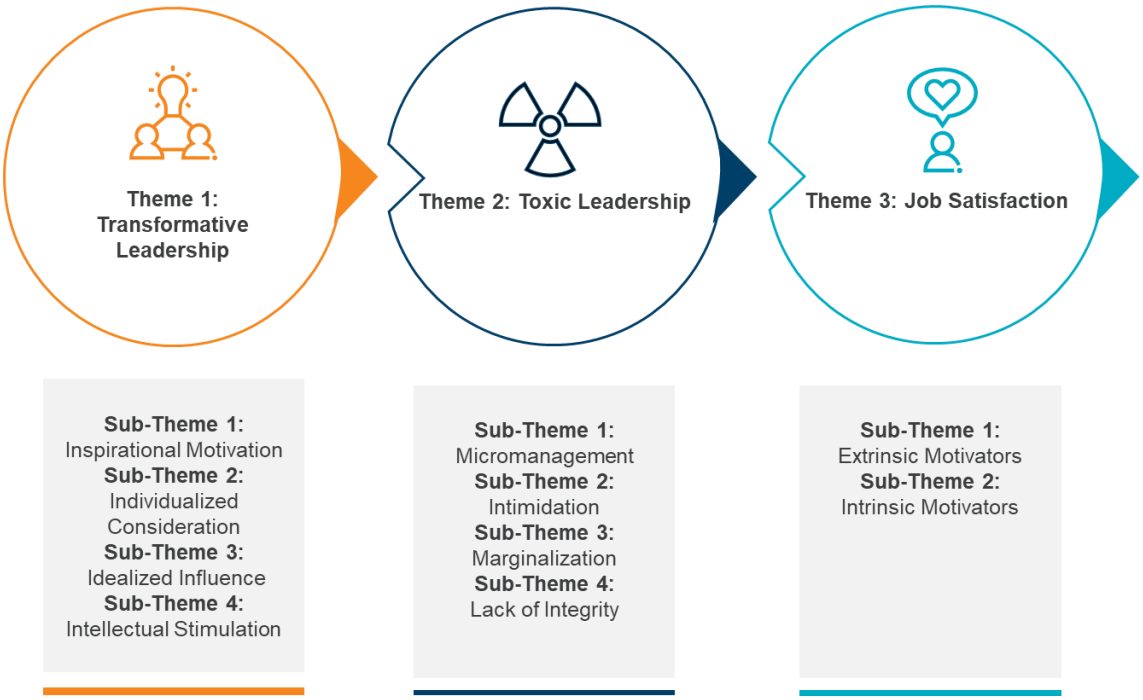
Research Findings

During the semi-structured interviews, reflective notes captured significant data-based insights by memoing. Memo writing, or "memoing," is a fundamental analytic approach in qualitative data analysis since it helps researchers make conceptual connections from raw textual data to abstractions used to describe the phenomena of interest (Kodish & Gittelsohn, 2011). The research began using a deductive coding method inductive, meaning the study progressed from a large set of raw data, later analyzed through the constant comparative method to generate themes, patterns, and findings without the constraints of more structured methodologies (Thomas, 2006; Strauss & Corbin, 2008). Data analysis started with the initial round of inductive coding (Saldana, 2021), and axial and selective coding followed as themes emerged from the data (Charmaz, 2014).

The data analysis process led to three major themes and ten correlating sub-themes presented in this chapter. The significant themes provided a framework for further understanding leadership traits and behaviors that may enhance a technology professional's job satisfaction. The process of developing codes and overarching themes may be predefined — sometimes referred to as deductive or "a priori" — or emergent, or a combination of the two (Stuckey, 2015).

Figure 3

Study Themes and Sub-Themes



Research Themes and Sub-Themes

Theme 1: Transformative Leadership Behaviors

The first theme that emerged from respondent interviews centered around transformative leadership. As the responses were analyzed, frequently observed behaviors closely associated with transformational leadership traits became the first over-arching theme from the data. Although difficult to measure due to its subjective nature, there is better knowledge of the actions performed by transformative leaders, the personality traits underpinning those behaviors, their influence, and the development of enigmatic personalities (Bass, 1999). In addition, transformational "core" behaviors highlight a compelling vision, the collective identity, and the leader's role-modeling behaviors will transcend the self-interests of followers to motivate them to assume responsibility for the betterment of the group (Li et al., 2019).

Figure 4

Direct Quote Sample by Code for Q3 Responses

The first central theme emerged from responses from the following questions: 1. What engages you about your work? 2. What disengages you about your work environment? and 3. What are some of the behaviors you want to see in your leaders? The latter question centers around the traits and behaviors of leaders that they, as technology professionals, respond positively to, create a positive working environment, and keep them engaged and fulfilled at work. Leadership behaviors and their followers' interpretations and perceptions are the study's cruces. The question starts respondents thinking about leadership experiences past and present and the traits and behaviors they have experienced and have come to expect in a leader. Respondents P11 and P15 highlighted the need for "charismatic and servant leaders to be identified, valued, and utilized. Understanding the team performing at their best and leader willing to serve will be successful when their subordinates succeed."

Figure 5

Common Traits of Transformational Leaders

Note: These traits were derived from "Two decades of research and development in transformational leadership," by B. M. Bass, 1999, European Journal of Work and Organizational Psychology, 8(1), 9–32. https://doi.org/10.1080/135943299398410.

According to Bass (1985), the transformational leadership construct consists of four sub-dimensions: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. Therefore, the themes presented in the data, codes, and direct responses were analyzed, and alignment to the four dimensions of transformational leadership was discovered. As a result, these categories became the four sub-themes of the overall transformational leadership central theme.

Sub-Theme 1: Inspirational Motivation

Question 8 during the interview asked the respondents, "How does your leadership provide feedback" and similar patterns became apparent in the data. For example, respondent P14 did not appreciate when leaders did not deliver timely feedback, noting, "not knowing where

I stand impacts my job satisfaction.” In contrast, respondent P15 stated that "not receiving feedback along the way and then getting a review full of areas to improve" did not assist their growth. When speaking to respondent P6, feedback from leadership was welcomed, but poorly delivered negative feedback was not; "Taking small mistakes and blowing them out of proportion" disengaged them from work. Lastly, leadership that started any feedback with negativity was seen as demotivating. Respondent P6 also felt that when "leadership starts with criticism during feedback reviews, it immediately makes you like you have to defend yourself," and caused them to feel undervalued, discouraged, and frustrated. Inspirational motivation can be characterized as a leadership stance that instills confidence in people in their performances, communicates effectively, and delivers constructive feedback (Khan et al., 2020).

Communication was another pattern that emerged and aligned with inspirational motivation. Leaders must "effectively communicate," "clearly communicate goals and the overall vision," and have "an open and honest communication style," as well as ensure "a balance between the number of communications about work or metrics vs. emails giving kudos or showing appreciation." Instilling confidence is another core attribute of a leader that exhibits inspirational motivation. Participant P18 stated, "leaders that put people first – whether, through inspiration, communication, a leader is someone that needs to be able to unify and motivate." At the same time, respondent P5 preferred leaders that "are interested in my personal development goals and objectives.” Respondent P2 appreciated a leader “who gets to know everyone's skills and puts them in the right place to shine."

The goal of inspirational, motivating leaders is to encourage followers to go above and beyond expectations to achieve the organization's vision. For example, feedback from respondent

P14 articulated that "good leaders encourage me to do more – to go above and beyond," and respondent P15 claimed they "appreciate a leader that takes time to understand my skills and plug me into things that I can succeed at."

Sub-Theme 2: Individualized Consideration

Taking the time to build individual relationships with their teams and demonstrate sincere empathy was a fundamental need for the technology professionals in the study. Respondent P20 mentioned wanting a leader that demonstrates "genuine concern and wanting to know you on a personal level." Respondent P3 found that "good collaboration and working relationship with peers and leaders" and "showing care for their employees" were motivators for engaging in company culture and the work. Respondent P20 found in their experience that "good leaders are also people-centric and know how to empower those below them." Respondent P4 highlighted the level of awareness a leader needs by "understanding how people work and not just computers," and respondent P3 claimed, "If you want to be someone people follow, you need to understand each of their strengths and weaknesses." Leaders demonstrate individualized consideration when they pay attention to the followers' developmental requirements and encourage and coach that development (Bass, 1999). In addition, individualized consideration includes a leader's ability to foster a positive environment, care about their followers' well-being, and present innovative learning opportunities (Bass, 2003). Leaders who show individualized consideration offer guidance, coaching, encouragement, support, and help to address followers' concerns and needs (which leaders recognize as different and unique) (Bass, 1990).

"Sincere participation in a mentor/mentee relationship has a positive impact," P5 stated, leaning forward. Coaching and mentoring "are art forms," they continue, stating it is "difficult to

find people that have that skill." They continue by maintaining that technology is "leading with I.Q. (Intelligence Quotient), and if you do not possess E.Q. (Emotional Intelligence), you will not get very far as a leader." Respondent P10 finished the topic by commenting, "you need trust to build solid mentoring relationships, and you cannot always find that in everyone." Goleman (2010) believes that managers with a healthy mix of emotional intelligence (E.Q.) and intellectual intelligence (I.Q.) are more likely to be successful leaders in their respective areas than those with superior intellectual intelligence but underdeveloped emotional intelligence (Fareed et al., 2021). A leader that takes time to understand the individual skills within their team and "meets me where I am" was critical to respondent P5. Those leaders assist with "career development and are interested in my personal development goals and objectives." A common sentiment across respondents P4, P11, P20, and P21 was around showing "compassion, understanding, and the desire to help your team grow – understanding the skillsets of people and helping develop where they need it," performing "individual career development planning," and showing an "appreciation for unique skills and backgrounds."

Sub-Theme 3: Idealized Influence

Idealized influence highlights leaders who act as role models for their teams (Bass, 1999). These leaders are willing to take risks, have a clear vision, communicate effectively, and lead by example (Avolio & Bass, 1995). Respondents P2, P4, and P7 said they appreciate "a hands-on leader who will sit shoulder to shoulder with their subordinates in the trenches." Respondent P18 noted they felt more comfortable "when I have insight into the overall objectives and strategy (vision and mission) and how my contribution helps drive it." A common theme among respondents P4, P10, and P18 highlighted the axiom "a good leader does not have to remind you they are a leader – they just lead. They are genuine, and they listen." Good leaders

also "set an example," "they are approachable and do not hold themselves above others or lead by fear and intimidation," and they possess "a lack of intimidation and ego." Leaders use their ethical principles and morals in this dimension to lead and influence followers rather than apply their authority and power, allowing for their followers' trust and respect (Anwar & Balcioglu, 2016).

"Ethics, "authenticity," and "transparency" were key behaviors the participants expected to see in their leadership. Respondents P11 and P12's responses correlated being authentic with a leader having the ability to "admit when they do not know something and allowing the people under you to speak up if they do." In how leaders show concern for their well-being, respondents P.I., P4, P18 and cited "transparency, honesty, and approachability" as ways they feel comfortable, trusted and cared for in a working environment. Respondent P15 felt "authentic, transformational leaders are motivated by the good of many, recognizing that they succeed when those around them succeed." Leaders that exemplify idealized influence conduct activities that stress shared interests by emphasizing a collective sense of purpose, making personal sacrifices for the group's benefit, establishing a personal example, and displaying ethical standards are characteristics of leaders (Bass & Avolio, 1994).

Sub-Theme 4: Intellectual Stimulation

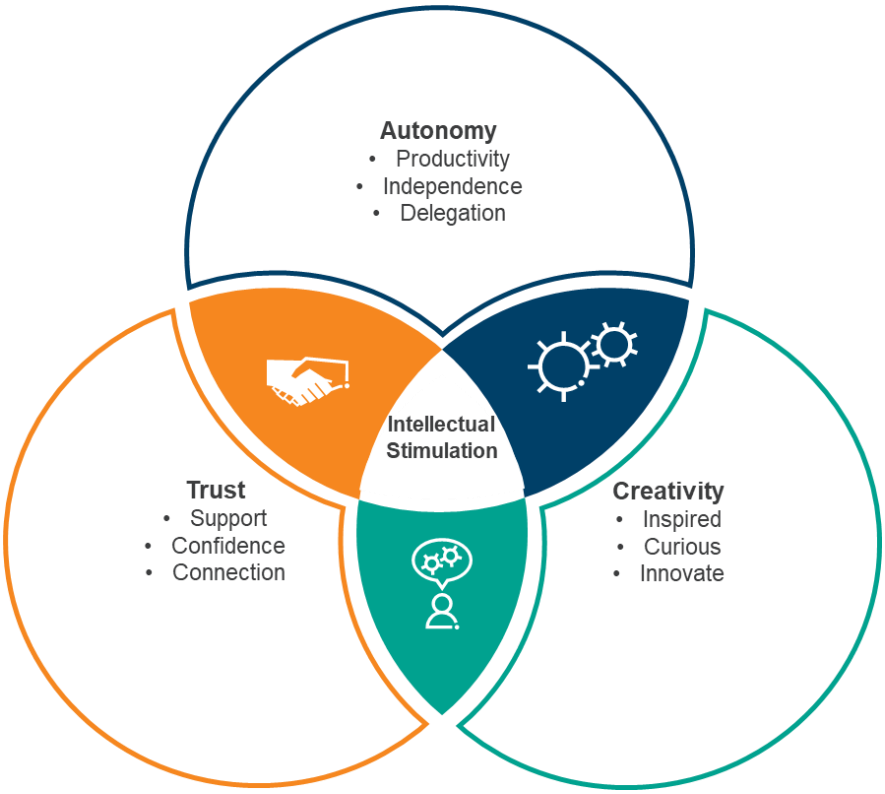
When transformative leaders intellectually stimulate, they encourage their followers to be creative by challenging presumptions, reframing challenges, and adopting novel approaches to familiar circumstances (Bass & Riggio, 2006). They promote creative thought by pushing followers to think "outside the box" and to employ exploratory thought processes (Sosik et al., 1998). Followers who challenge their own traditions and beliefs (Huang et al., 2003) and express

themselves honestly without fear of negative interpersonal consequences are more likely to generate innovative solutions to issues (Kahn, 1990).

Seven respondents drew a correlation between autonomy, trust, and creativity (Figure 5). When a leader gives them the autonomy to make decisions and trusts that decision, they feel empowered to be more creative when engaging in problem-solving exercises. Respondent P16 found that leaders that allowed for "innovation and creative problem-solving" and "a certain amount of autonomy to solve challenges" also felt a level of implicit trust from their leadership. Respondents P1 and P19 found that what engages them most about their current work situation is having people around and above them that "allow me the creativity to find the solutions."

Figure 6

Intersection of Autonomy, Trust, and Creativity



Respondents P14 and P19 also felt it was essential to have a leader who "challenged the status quo" and is a "role model for thinking outside the box" when solving more complex challenges. For example, respondent P16 felt that "when leaders understand my vision and how that vision has been formed by experience and learned mistakes, and then allow me to use those lessons learned to solve problems," it enables more creativity. Likewise, respondent P10 felt that "if you give your team the guardrails and guidance (to solve a problem), and allow them to find the best way to get it done," it produces greater trust between leader and subordinate.

Data Analysis

Based on the interview questions asked to the 22 research subjects, their individual and collective responses aligned to the "4 I's" of Transformational Leadership (Inspirational Motivation, Individualized Consideration, Idealized Influence, and Intellectual Stimulation) and supported the central theme of Transformative Leadership. According to a meta-analysis of Transformational Leadership, it correlates with follower job satisfaction, happiness with their leader, leadership effectiveness assessments (Banks et al., 2016), and follower motivation (Judge & Piccolo, 2004). In addition, respect, trust, setting clear role expectations, and a democratic approach to problem-solving at work are essential to transformative leadership skills (Graen & Uhl-Bien, 1995).

Theme 2: Toxic Leadership

While analyzing the research data and assessing responses on what the respondents perceived as "positive" leadership behaviors, negative or less positive traits behaviors emerged. These behaviors were aligned with toxic leadership traits when grouped into themes. For example, respondent P21 described an experience of an impactful leader when answering interview question seven (Tell me about a particular leader who impacted you by their actions –

what did they do? Why did this leader's impact stay with you?). The impact had a negative effect stating, "It was a very negative experience – did not have any of the (previous) leadership characteristics I mentioned (empathy, embodiment of culture, trust and patience). (They were) micromanaging, generated a frenzy of fear – cultivated the fear among employees."

Political scientist Marcia Lynn Whicker coined the term "toxic leader" in her 1996 book, "Toxic Leaders: When Organizations Go Bad." Whicker (1996) described toxic leadership in terms of organizational behavior as antagonistic, insecure, and hostile. In U.S. Army Doctrine No. 6-22, toxic leadership was addressed for the first time in military terms (Department of the Army, 2019). Consequently, toxic leadership combines self-centered attitudes, motivations, and behaviors that can negatively impact task performance, the organization, and subordinates (Uysal, 2019). Toxic leaders prioritize individual personal objectives over organizational goals and cannot tolerate criticism (Hadadian & Zarei, 2016). They are leaders whose methods have severe, permanent, or toxic effects on the individuals, organizations, and cultures exposed to them (Heppell, 2011).

In addition, a leader's toxic and harmful behavior, such as excessively blaming subordinates for mistakes, imposing unreasonable work demands, insulting their talents, and demeaning their skills, can cause physical and emotional harm (Tanuwijaya & Jakaria, 2022). For example, respondent P11 found that "leaders that expect too much work in too little time causes burnout, contention and stress." A substantial body of research suggests that destructive leadership is connected with a leader's characteristics, which impact interpersonal relationships and organizational culture (Aravena, 2017). Many studies focus on destructive or toxic leadership as a phenomenon, centering on the behaviors and personality paradigms of the leaders themselves (Aravena, 2017). For example, respondent P3 felt that "leaders that seek the

spotlight, are ‘me first’ and all about how they look instead of how the team operates" are destructive to the team dynamic and the culture. Respondent P1 described the following as "toxic leadership traits; people who say they will collaborate, leaders that forbid you from working with people in their organization and leaders pretending they know things that they do not and leaders that only manage up."

Figure 7

Toxic Leadership Traits

Adapted from Singh, N., Sengupta, S., & Dev, S. (2018). Toxic leadership: The most menacing form of leadership. In *Dark sides of organizational behavior and leadership*. IntechOpen.

Sub-Theme 1: Micromanagement

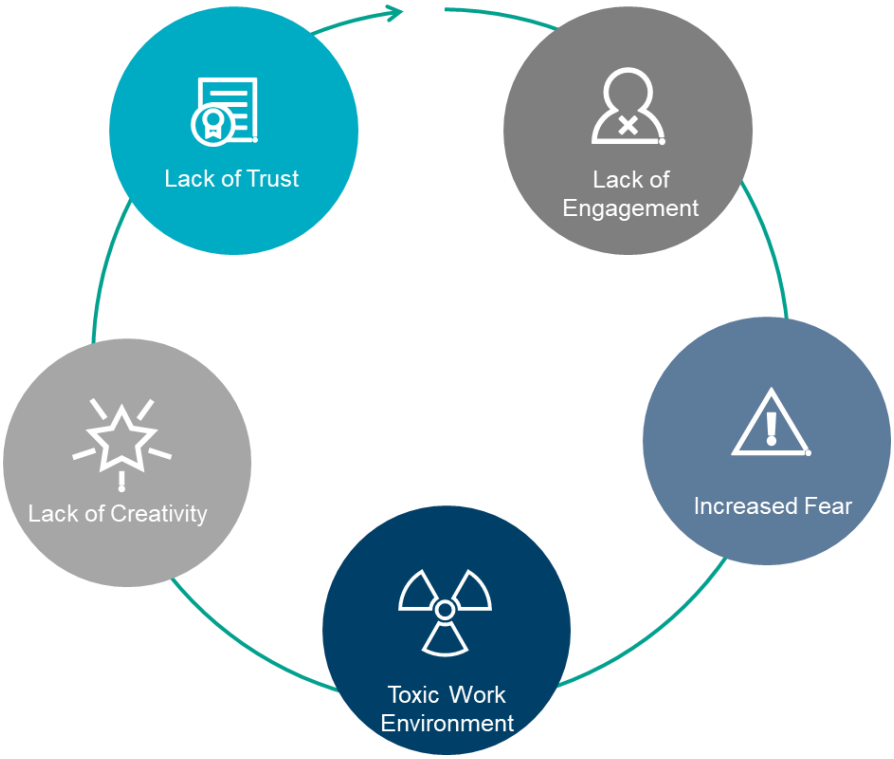
Why would a leader in the Army or any other organization choose to micromanage subordinates, demonstrate a lack of regard for them, refuse to listen to or value their input, or be disrespectful, vindictive, or threatening (Doty & Fenlason, 2013)? Respondent P20, who also identified as an Army reservist, stated, "I have left jobs because of the leadership – not feeling

they were genuine or trustworthy.” When a manager is unwilling to delegate, prioritizes minutiae over the broad picture, and inhibits employees from taking the initiative, they may be drifting into micromanagement (Dhingra, 2015). Chambers (2004) cited a lack of confidence, the fear of others' failure, not being the one to make an impact, the threat of others having more knowledge and being able to articulate that knowledge better than they can, and a lack of self-confidence as reasons why some leaders micromanage (Figure 6).

According to data, 60% (n=22) of respondents cited micromanagement as a leadership quality they did not appreciate, which caused them to disengage. Respondent P10 boldly stated, "micromanagers are not leaders. If you have to micromanage everything, you are not a leader; you are a boss, and a poor one at that." Even over mundane and repetitive tasks, people who need to micromanage instill a feeling of having a "task manager" and not a true leader. For example, respondent P13 disengaged from leaders due to "delegation through micromanagement without ownership, then taking the ultimate credit for the good work you do." Ultimately, this can lead to feeling like your leader is "not invested in your personal success, only theirs, but they are quick to blame you for an idea if it fails." Respondent P19 stated that managers who are "not involved or understand a situation but make decisions without having all of the facts to ensure that others around them know they are in control of their people, and must give autonomy to the people they hire, and it would seem micromanagers would experience a much higher turnover rate of their employees." Respondent P8 felt leaders that are "insecure about their abilities and have a consistent urgency for everything to get done" become micromanagers out of necessity for self-preservation.

Figure 8

Impacts of Micromanagement



Sub-Theme 2: Intimidation

A toxic and dominant leader constantly criticizes the team members, coerces and threatens them, and attempts to regulate and keep an eye on every circumstance within the company (BĂEȘU, 2018). A toxic and dominant leader is more focused on himself, lacks empathy for the staff, and engages in open displays of humiliating and punishing behaviors that reduce employees to a subservient, vulnerable state (Almeida et al., 2020). Toxic leaders constantly engage in dysfunctional behaviors to mislead, threaten, force, or harshly punish people to achieve their goals, which undermines motivation and initiative (Winn & Dykes, 2019).

In a crisis, a leader's capacity to be aggressive and take charge is necessary, but excessive control can come off as intimidating and micromanaging, which are perceived as threatening by subordinates (Webster, 2015). Respondents P5, P10, and P13 felt that poor leaders who could only communicate using negativity and aggressive behavior adversely affected their overall organizational engagement. Respondents P5, P11, P12 and P16 cited leaders who exhibited "combative, intimidating and negative communication styles" and "cultivated a culture of fear through frenzy and intimidation" were seen as toxic enough to leave that position and, ultimately, the company if they felt that behavior was tolerated or even rewarded. P11 state, "these types of leaders are deceitful and overly competitive" and "yell and undermine others, including peers and those working under them" to keep their place in the hierarchy.

Lastly, intimidation is a tactic that seemingly insecure leaders seeing an alleged threat may employ on subordinates to maintain their place of perceived power. Subordinates with unique knowledge or abilities are likely to garner respect and deference from other group members and leaders, which can elevate their position and influence (Case & Maner, 2014). In addition, subordinates with the potential for higher status and authority can pose a challenge to the current leader of a group if he or she is concerned with maintaining his or her position at the top of the hierarchy (Case & Maner, 2014). For example, respondents P7 and P13 cited "leaders intimidated by subordinates smarter than them" as a perceived negative leadership trait.

Sub-Theme 3: Marginalization of Employees

The concept of marginality introduced by Robert Park (1928) is a symbol that refers to processes or actions by which individuals are kept at or pushed beyond the edges of a particular society. In business, employees are commonly marginalized by race, gender, religion, and sexual

orientation. Critical feminist management and organization studies show how some voices based on gender, race, and class are frequently given preference in the workplace while others are marginalized (Collinson, 2017). Singh et al. (2019) claim that one of the most harmful forms of abuse is the marginalization of employees based on non-merit considerations or feelings of jealousy for those who have developed more advanced levels of critical thinking and are perceived as threats to those in current leadership positions.

Members of marginalized groups are frequently conscious of their visibility or hypervisibility (Buchanan & Settles, 2019). Collins (2000) described stereotypes as restricting images that inhibit people from being seen accurately and expressing their true selves in public. Because of this, there may be a lack of support, which can be emotionally and psychologically taxing, diminish productivity, and cause low job satisfaction (Buchanan & Settles, 2019). In addition, because invisibility and hypervisibility are forms of identity-based mistreatment, people frequently attempt to influence and control how others perceive them and avoid discrimination (Bennett et al., 2019; Fernando et al., 2018; Kallschmidt & Eaton, 2018; Roberts, 2005; Settles et al., 2018).

Seven of the 22 respondents discussed experiencing marginalizing behaviors from current or previous leadership. For example, respondent P3 said, "I do not like someone that shows favoritism and allows cliques and inside jokes, all of which create a toxic culture where you feel uncomfortable asking questions and cause people to feel left out." Another concern among research respondents P3, P5, and P7 was leaders with "low or no tolerance for diversity within the teams" or leaders "who are not tolerant of other people's cultures or backgrounds." This

behavior led participant P6 to add, "you feel like you can not bring your full self to work for fear of being marginalized or ostracized because of it."

Lastly, two interviewees, P4 and P5, noted severe behavior from leaders that included "cruelty, bullying, and feeling disrespected as a human" and those that "use unnecessary derogatory or inappropriate terms or phrases to describe situational items or circumstances." These two respondents believed this behavior demonstrated that their leadership did not value them as employees or people and did not care for their well-being.

Sub-Theme 4: Lack of Integrity

According to Bhandarker and Rai (2019), toxic leaders are divisive, act without integrity, and endanger their employees' well-being and self-esteem. On the other hand, authentic transformational leaders are regarded to be morally upstanding (Bass & Steidlmeier, 1999), ethical (Parry & Proctor-Thomson, 2002), and capable of liberating and empowering those who follow them (Price, 2003). Integrity provides a substantial justification for trust. A sense of justice or moral character offers some predictability, which can help people deal with uncertainty. Since a leader with integrity will be seen as ethical, others will trust that leader (Engelbrecht et al., 2015).

The majority of research on unethical leadership and lack of integrity has concentrated on interpersonal and high-intensity forms of harmful leader behavior, including abusive supervision (Tepper et al., 2017), toxic leadership (Schmidt, 2008), and bullying (Einarsen et al., 2009). Research participant P17 discussed integrity in terms of "having a buck stops here mentality," leaders "talking the talk and walking the walk," and "doing what they say they will do."

Respondent P17 also declared that a good leader "acts with integrity at all times – not just when people are looking, or when they are being judged for decisions."

The research participants saw integrity differently, depending on their perspectives and experiences. For example, P1, P10, P18, and P19 felt that leaders without integrity "pretend to know solutions and answers to things that they do not, but they misrepresent facts and answers," "leaders that need to be the smartest person in the room," and "leaders giving out false information internally and externally". In addition, these respondents found that these leaders do not inspire their subordinates, portray unscrupulous behavior when dealing with peers and leaders, and only understand how to "manage up to move their own careers forward."

Analysis

According to a large body of research, humans react more strongly to negative information than positive information, and process adverse events more subtly than happy ones (Baumeister et al., 2001; Unkelbach et al., 2008). The leadership discipline is significantly impacted by the notion that "bad is stronger than good." Negative leader behaviors are likely to have a more negative influence on followers than good leader behaviors, and the adverse effects of such negative behaviors are likely to exceed the positive effects of positive connections (Schmid et al., 2018). Toxic leadership habits negatively impact employees, which can significantly negatively impact an organization's productivity and overall structure. Consequently, according to the leader–member exchange theory, there is a clear correlation between subordinates' perceptions of toxic leadership and its negative impacts on the quality of relationships between leaders and their employees (Xu et al., 2011).

In their qualitative study concentrating on young workers in the service industry in Canada, Starratt and Grandy (2010) concluded that poor leadership fosters a dysfunctional organizational culture that may include an escalating climate of mistrust, disloyalty, and low employee morale (Abalkhail, 2022). Furthermore, as a result of destructive leadership, followers experience low self-esteem, feelings of insecurity, and anguish at unjust treatment, resulting in disengagement and burnout (Pelletier, 2010; Tepper, 2000).

Theme 3: Job Satisfaction

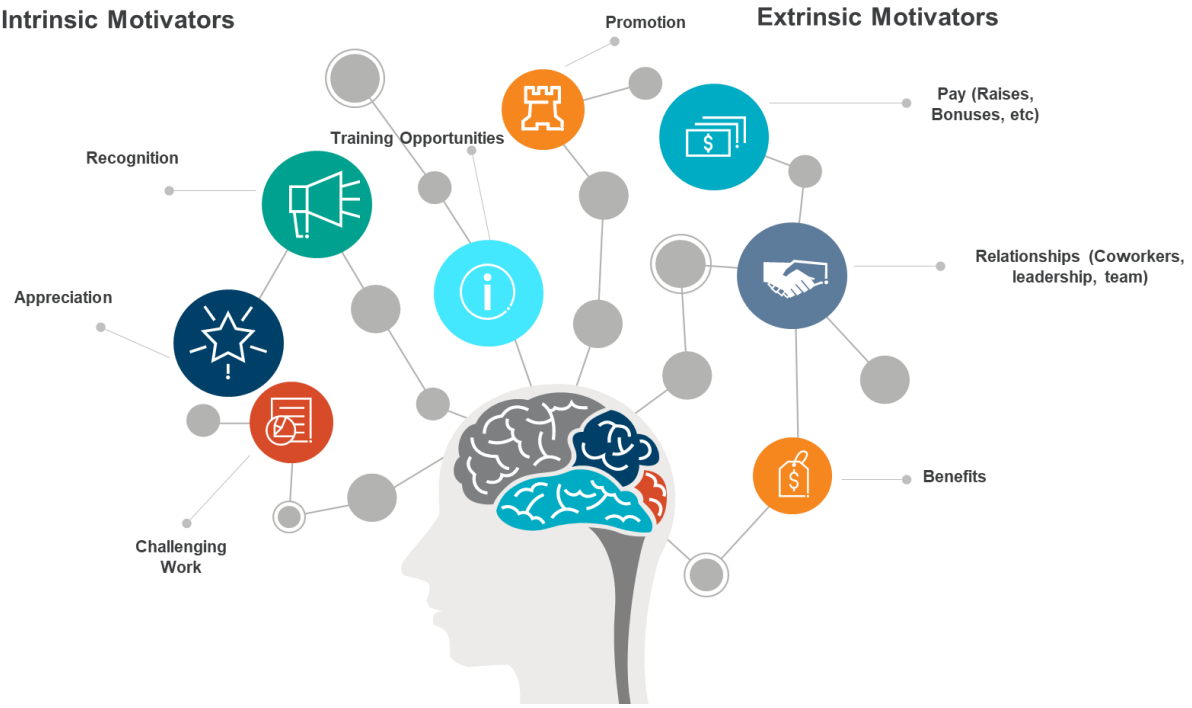
When interviewing research participants about leadership traits, job satisfaction emerged as a theme due to the connection between the participants' perceptions about particular leadership traits and how those traits motivated or demotivated them in their daily work environment. Job satisfaction refers to the positive emotions that arise from a person's employment and work experience (Permana et al., 2021; Valentine et al., 2011). According to Tnay et al. (2013), job satisfaction is a confluence of psychological and environmental factors (intrinsic and extrinsic) that can lead someone to express fulfillment with completed tasks (See Figure 7). Extrinsic work satisfaction refers to characteristics of a job unrelated to it, such as compensation and management style (Riyanto et al., 2021). In contrast, intrinsic job satisfaction refers to responses to job characteristics relevant to it, such as challenging work, autonomy, and variety (Spies, 2006). Employee contentment and job descriptions can also be considered internal job satisfaction (Yurchisin & Park, 2010).

Employee job satisfaction in an organization is significantly impacted by how a leader treats their followers (Mehta & Maheshwari, 2013). A study by Loke (2001) found a significant correlation between leadership behavior and employee job satisfaction and stated that leadership

behaviors explained 29% of job satisfaction. Additionally, studies have demonstrated that abusive leadership is adversely associated with job and life satisfaction and positively correlated with intentions to leave the organization and psychological suffering (Rayner and Cooper, 1997; Tepper, 2000).

Figure 9

Examples of Intrinsic and Extrinsic Motivators



Adapted from Mohd Noor, S. N. A., & Zainordin, N. (2018). The impact of rewards as motivation on job satisfaction in a quantity surveying consultant firm. *International Journal of Modern Trends in Social Sciences*, *1*(4), 1–14.

Sub-Theme 1: Extrinsic Motivators

Numerous academics have examined Herzberg's hygiene-motivation theory to look at job satisfaction (Temple, 2013; Steingrmsdóttir, 2012). Herzberg defined hygiene (a demotivator) as any circumstance or event that makes workers feel disconnected (Alfayad & Mohd Arif, 2017). As a result, it makes them less likely to expend further personal energy on work (Alfayad & Mohd Arif, 2017). When demotivators are prevalent, such as low pay, hazardous or unpleasant working circumstances, a lack of job security, supervisor abuse, or mistreatment, people are more likely to not go above and beyond (Pupavac, 2015).

As all the respondents discussed previous and current leadership experiences and what motivates them to stay engaged at work, only a third of them cited extrinsic motivators impacting their engagement at work. For example, when asked directly, "what causes you to engage at work – what motivates you? Respondent 10 answered, "Money—the ability to pay my bills. Rinse and repeat." Participant P9 voiced the opposite side of the spectrum, commenting, "misalignment of compensation expectations demotivates me."

Respondents P7, P12, and P21 all cited a "clear lack of direction," "constant level of pressure to get things done," and a "lack of initiative and motivation" by their leadership as demotivating extrinsic factors impacting their desire to do more than what is asked, or volunteer to take on new assignments or projects. Finally, respondent P17 listed a few key behaviors that caused them to disengage, affirming that "passive-aggressive behavior from leaders and colleagues, political gamesmanship, and a constant reminder from those around me that I am not good enough for the position I am in are all very demotivating."

Sub-Theme 2: Intrinsic Motivators

Intrinsic motivation refers to an individual's desire to learn and work and inclination to pursue a self-satisfying activity (Anwar et al., 2018). Intrinsic incentives are intangible and non-monetary incentives that exist within the job, such as the gratification of finishing a task, being allowed autonomy for creativity, challenging work, or receiving an employer's appreciation (Zafar et al., 2014). In addition, intrinsic motivators are often enhanced by leadership behaviors that inspire, intellectually stimulate, and encourage employees (Siyal et al., 2021). For example, employees' enthusiasm to continue working in the same environment and position will increase if their managers acknowledge the successful completion of a given assignment. In this view, intrinsic motivators include job happiness, a conviction in their self-efficacy, and higher morale that promotes employee retention (Herzberg et al., 1959). Respondent P6 said, "If I am not being listened to, and I actually speak out and speak my mind to leadership, and I feel it is being dismissed, that will make me shut down." Not being appreciated was a common idea expressed by participants. Respondent P6 also commented that the "number one thing that makes me shut down and disengage is not being appreciated." Respondent P14 said, "[I am] demotivated by people not invested in my success, and then blaming me for their failures", and respondent P5 feels an extrinsic demotivator for them is "not being appreciated for the work being done myself and the team – feeling expendable and replaceable." Along the lines of not feeling valued or appreciated, respondent P4 commented, "too much busy or boring work – repetitive tasks" make them not want to put in the amount of effort they should.

Studies have identified a negative relationship between workplace toxicity and employee creativity, which is mediated by emotional weariness and intrinsic drive (Malik et al., 2017). The results provide a mediator model in which both leader and co-worker weariness leads to

emotional exhaustion, decreasing their intrinsic motivation at work and, ultimately, their desire to create and innovate (Hur et al., 2016). A leader can fulfill the employees' basic psychological needs by listening to their perspectives, providing support and feedback, boosting autonomy, and avoiding toxic behaviors, fostering employees' autonomous motivation (Pontinha Leite, 2018). Studies have demonstrated that an empowering leadership style, such as transformational leadership, does satisfy the fundamental psychological demands of autonomy and job satisfaction (Hetland et al., 2011; Deci et al., 2017). Autonomy was a fundamental need cited by the research participants needed for job satisfaction. Respondent P19 declared, "leaders should give autonomy to the people they hire – trust those under them to get the work done.' Respondent P18 stated, "a lack of autonomy to make decisions ot tackle challenges makes things more difficult and demotivating."

Professionals interviewed as part of this study felt that when their leadership did not believe in them, it caused "self-doubt and low confidence" and "feeling like a failure." Respondent P6 was even told they were "not allowed to attend conferences, training or to obtain additional certifications due to leadership not wanting to invest [in them]," which led to a feeling of "imposter syndrome." Despite being skilled and competent, given their professional or academic accomplishments and certifications, people often feel inadequate and need more confidence in their abilities (Clance & Imes, 1978). Respondent P14 mentioned having leaders that "are not invested in your success" as another demotivator that impacted their happiness in the workplace.

Analysis

An observant leader knows that unmet needs often catalyze motivation, and targets are decided upon to fulfill those demands (Jamal Ali & Anwar, 2021). According to a study (Farooq

& Hanif, 2013), intrinsic and extrinsic motivational variables are crucial for developing a lasting relationship with an employee. According to McClelland's need theory, intrinsic elements outweighed extrinsic ones like pay, benefits, and compensations in terms of influence. Another study (Dysvik & Kuvaas, 2010) found a strong correlation between an employee's intentions to quit and the presence of obstacles or constraints in achieving personal goals.

Based on the data, most research participants (>80%) focused more on the lack of intrinsic rewards as demotivators of job engagement. When employees feel appreciated and recognized for their efforts, they push to go above and beyond what their bosses expect to be recognized and rewarded for their work (Admassie, 2019). It motivates workers to aim for excellence (Fanggidae et al., 2019). According to Soni et al. (2017), an employee's inclination for their career is determined by whether their current role inspires them.

Summary

This chapter presented findings from semi-structured interviews conducted among 22 U.S. technology professionals inquiring into their backgrounds, experiences, and perceptions of leadership behaviors. Data analysis was conducted through inductive, deductive, and thematic coding, resulting in three overarching themes and ten sub-themes grounded in the data. The themes and correlating sub-themes provide critical insight into the internalized experiences of leading and following in the technology sector.

In addition, the experiences captured from the participants created the main themes and subthemes of transformational leadership of inspirational motivation, intellectual stimulation, individualized consideration and idealized influence, toxic leadership and the sub-themes of

micromanagement, intimidation, marginalization and lack of integrity. Job satisfaction was the final central theme, with intrinsic and extrinsic (de) motivators as the sub-themes supporting the research question: What transformational leadership traits enhance technology professionals' job satisfaction?

The fifth chapter discusses the study's themes, subthemes, and a conceptual framework derived from the data and research. Next, there will be a presentation of the study's findings and a discussion of the broader context surrounding leadership attribute motivators, job satisfaction, and implications for practice. Finally, limits and future research proposals will be outlined.

Chapter Five: Results, Conclusions, and Recommendations

Although there has been a significant amount of study on transformational leadership over the past 30 years, there has been limited research on IT professionals (Bennett, 2009; Hickman & Akdere, 2019). For an organization to be successful, its leaders must effectively manage and inspire their IT staff to realize their full potential, be engaged, accept change, and make sound technical judgments (Abii et al., 2013; Ladelsky & Catana, 2013; Anvari et al., 2014; Sunarsi et al., 2021). Therefore, it is crucial to look into how IT employees view their managers and determine the leadership type that fosters the best performance (Thomas, 2015). According to research by Rosenbaum (1991), successful technical leaders coach for peak performance, organizational control interference, coordinate and support the professional growth of subordinates, increase individual productivity through collaboration, and promote autonomy.

Twenty-two participants were interviewed using a list of pre-determined questions. Memoing was used during the interviews to capture and refine critical ideas and experiences. A comprehensive data sheet was created to correlate common feelings and experiences and allow

three themes and ten subthemes to emerge. Inductive, deductive, and thematic coding generated a theoretical model around the leadership behaviors experienced by technology professionals and a paradigm of any impacts on organizational culture and job satisfaction. The technology professionals expressed dissatisfaction with leadership that shaped or tolerated a toxic or dysfunctional working environment, an absence of concern and empathy for their employees and did not support and build up their team's confidence and skills. The study's findings looked through the lens of various levels and tenures of technology professionals' experiences regarding positive and negative leadership traits and behaviors and how they are personally impacted. This chapter will also cover the study's theoretical implications, research limitations, and recommendations for future studies.

Findings

The research data showed that technology employees experience various positive and negative leadership behaviors throughout their careers. Furthermore, these behaviors shape their satisfaction with their leadership, company work culture, and personal leadership styles. Therefore, the study explored how encounters with various leadership behaviors negatively or positively impacted employees' feelings and perceptions of their organization. Previous research supports the theory that successful leaders and their followers have reciprocal impacts (Bass & Avolio, 1993; Bass, 2008; Long et al., 2017). For example, one of the findings implies that positive reinforcement from leaders and the ability to build encouraging relationships is conducive to employee job satisfaction (Anvari et al., 2014; Ghasabeh, 2020; Nasir, 2021). When study respondents were asked what engages them about their work, most cited recognizing collaboration, opportunities for growth and autonomy. They also mentioned that it was vital for them to work with and for leaders they respected and trusted. Inversely, when asked what causes

them to disengage, primary responses included leaders who lack concern for their people, are not appreciated and are constantly micromanaged. A lack of leadership support was also high on the list of causes of disconnection and dissatisfaction.

How an employee reacts to a particular leader is complex and unique. However, the data compiled and analyzed through this study shows shared perceived behaviors that the IT professionals interviewed for this study feel both benefit and harm job satisfaction and workplace culture. Furthermore, in a seminal study by Bennett (2009), 3,000 members of the Association of Information technology Professionals (AITP) were surveyed using 45 questions of the Multifactor Leadership Questionnaire (MLQ-5X) created by Bass and Avolio (2004) measuring extra effort, manager effectiveness, and overall satisfaction with their leadership. The subordinates who perceive the highest degrees of transformational leadership are the most satisfied with their management. The survey results reinforce the idea that technology professionals prefer leaders that embody behaviors such as putting their teams' interests ahead of their own, helping them achieve personal and professional goals, encouraging employees, and cultivating a culture of collaboration, clear communication, transparency, and trust (Khan et al., 2020).

Additionally, U.S. technology professionals in the study also mentioned the need for technology leaders to have the necessary skills to manage highly technical resources and those that are more strategy focused. However, even though the data revealed that technology professionals appreciate leaders who understand how to do their jobs, there is a perceived trend to promote technical people simply because they are good at their jobs, even if they do not have the required skills to lead others. Showing care for individual well-being was another leadership

behavior that surfaced from the data, highlighting the desire for compassion, empathy, and sincerity.

Limitations

Small sample size is the first limitation of the study and a fundamental limitation of any qualitative inquiry when compared to quantitative research. In most qualitative investigations, the sampling dilemma is always present and must be managed to ensure the reliability of study findings and initiatives (Creswell, 2014). Depending on the subject of qualitative research, studying all occurrences of a phenomenon is either impossible or too expensive, and it is not easy to generalize (Creswell, 2014; Pajo, 2018). This condition restricts the researcher, who must select a specific proportion as the study sample (Saldaña & Omasta, 2018).

A second limitation is a challenge in qualitatively measuring concepts such as leadership traits in others and the effect of those traits on individuals' job satisfaction. In addition, these concepts are difficult to measure, capture and analyze as the feelings and personal experiences of others. To mitigate this limitation, the researcher used direct quotes from the participants used previous studies within the literature to support the findings. By integrating relevant participant quotes into the data analysis, the researcher gives participants a unique voice in the outcomes while bolstering the research's credibility and transparency and mitigating potential study limitations (Roller & Lavrakas, 2015).

Recommendations for Future Research

Due to limited research on the impact of leadership behavior perceptions amongst technology professionals, additional quantitative research is suggested to determine if relationships exist between transformational leadership behaviors, job satisfaction, and

organizational culture, or all three. In addition, determining the validity of the claims from the qualitative data would lend further credibility to this research study.

The IT industry has come under intense scrutiny for diversity and inclusion issues, including misaligned pay between genders and advancement opportunities for women and minorities within the technology sector. According to LeClair, Shih, and Abraham (2014), workplace unhappiness, pay inequity, pressure from family difficulties, gender discrimination, a lack of social change, and a lack of workplace support for growth are contributing factors (Peacock & Irons, 2017). Some of the misconceptions regarding female and male leaders may be dispelled by future research employing the same methods as the current study but also incorporating a comparison across subordinate gender. Similarly, research that compares technology professionals from underrepresented minority groups to non-minority employees would be beneficial for emphasizing the capabilities of minority leaders.

This study could also be conducted as a case study on one technology company to provide valuable insight into the corporate culture and prevalent leadership style. This research might be replicated in a single firm to examine employee perceptions of their immediate supervisor and the organization's most senior leaders to identify if any toxic leadership behaviors are systemic.

Practical Implications

The study highlights that although there are several leadership styles, there are mutually recognized behaviors that resonate with technology professionals and impact job satisfaction and workplace culture. Results compiled from the qualitative inquiry also emphasized the existence of toxic leadership behaviors and the need for technology professionals to identify and combat these negative traits. Other practical applications of the research include enhancing leadership

training among technology leaders, focusing on behaviors instead of skills, initiating programs to assess individual leadership styles, and educating employees on different leadership styles and behaviors and how to receive them. These uses will allow employees to understand better how to effectively interact with their leaders or handle them if they cannot.

This study's findings are consistent with the research of Hickman and Akdere (2018) and Sunarsi et al. (2021), which found that formal mentorship programs, positive leadership behaviors, constructive and consistent feedback, interest in growth and leader participation in a formal leadership development program can improve job satisfaction. As evidenced by the concepts offered in the works of Anvari et al. (2014), Gemeda and Lee (2020), and Pradhan et al., (2018), the outputs are advantageous to academia and for practical application in IT departments and businesses. This study showed that specific transformational leadership practices increase or decrease job satisfaction and workplace culture among US technology workers.

Summary

The exploratory study was founded on the seminal theories of Burns (1979), Bass (1985), and Herzberg (1959). Burns's (1978) and Bass's (1985) work on transformational leadership set the tone for thirty years of research on applying motivating, empathetic and supportive leadership behaviors in a company context. The practical application of these concepts has been demonstrated to have favorable effects on a variety of organizational outcomes, including enhanced managerial (Hater & Bass, 1988; Waldman et al., 1998), staff (Zohar, 2002), and team (Bass et al., 2003; Howell & Avolio, 1993) performance. In addition, transformational leadership is also associated with improved staff attitudes, such as job satisfaction and organizational commitment (Podsakoff et al., 1996; Walumbwa et al., 2005), as well as decreased adverse

outcomes, such as turnover intentions and burnout (Constable & Russell, 1986; Corrigan et al., 2002).

This research aimed to extend the application of theory to technology professionals and investigate if any of the perceived positive critical behaviors enhanced job satisfaction and resulting impact if negative behaviors were observed. Studies have demonstrated that teams managed by leaders with transformational behaviors had higher levels of job performance and job satisfaction than teams led by other leadership styles (Bass et al., 2003, Bass & Riggio, 2006; Slocum-Gori et al., 2011).

Toxic leaders have bad habits that tend to undermine their followers' motivation, self-esteem, and morale while also placing an unreasonable amount of work on them (Mehta & Maheshwari, 2013). Studies have shown that toxic leadership behaviors negatively impact job satisfaction (Thoroughgood et al., 2012; Nafei, 2019; Naeem & Khurram, 2020). According to studies by Desai (2018) and Zanabazar & Jigjiddorj (2018), job satisfaction and employee retention correlate positively.

Employees will make a significant effort to meet set goals if they feel their leadership shows appreciation for their work (Jeni et al., 2020). Conversely, the lack of appreciation, extrinsic motivation and support lower employee morale (Hammond & Waltemeyer, 2021). Consistent with the literature, a study on nurse managers by Labrague et al. (2020) supports earlier research associating transformational leadership practices with positive employment outcomes, especially regarding job satisfaction and the desire to leave. In addition, toxic leadership was related to poor work outcomes, including decreased work satisfaction, higher psychological distress and intention to leave, and frequent absences.

Michael Buckingham stated, "people leave managers, not companies" in the 1999 work "First, Break all the Rules." As this study revealed, many of the issues technology professionals noted having with their leaders had little to do with the work itself or even the company as a whole; it had to do with the attitudes, behaviors, traits and actions of their direct leadership. Is the transformational leadership style conducive to enabling job satisfaction among technology professionals? According to the data collected from respondents in this study, the traits outlined align with those commonly displayed by a transformational leader.

References

Abalkhail, J. M. (2022). Dysfunctional leadership: investigating employee experiences with dysfunctional leaders. *Career Development International*, *27*(3), 301–324. https://doi.org/10.1108/cdi-04-2021-0109

Abii, F., Ogula, D., & Rose, J. (2013). Effects of individual and organizational factors on the turnover intentions of information technology professionals. *International Journal of Management*, *30*(2).

Admassie, G. A. (2019). Impact of rewards management system on employees' satisfaction in case of DebreBirhan University administrative staffs. *Journal of Investment and Management*, *8*(1), 16. https://doi.org/10.11648/j.jim.20190801.13

Agarwal, R., & Mehta, A. (2014). Impact of performance appraisal and working environment on the job satisfaction and attrition problem in the Indian IT industry. *Paradigm*, *18*(1), 73–85. https://doi.org/10.1177/0971890714540367

Akdol, B., & Arikboga, F. S. (2015). The effects of leader behavior on job satisfaction: A research on technology fast50 Turkey companies. *Procedia - Social and Behavioral Sciences*, *195*, 278–282. https://doi.org/10.1016/j.sbspro.2015.06.159

Alfayad, Z., & Mohd Arif, L. S. (2017). Employee voice and job satisfaction: An application of Herzberg's two-factor theory. *International Review of Management and Marketing*, *7*(1), 150–156.

Al Khajeh, E. H. (2018). Impact of leadership styles on organizational performance. *Journal of Human Resources Management Research*, *2018*, 1–10. https://doi.org/10.5171/2018.687849

Almatrooshi, B., Singh, S. K., & Farouk, S. (2016). Determinants of organizational performance: A proposed framework. *International Journal of Productivity and Performance Management*, *65*(6), 844–859. https://doi.org/10.1108/ijppm-02-2016-0038

Almeida, F. (2018). Strategies to perform a mixed method study. *European Journal of Education Studies*, *5*(1), 137–151. https://doi.org/10.5281/zenodo.1406214

Al-Shibami, A. H., Alateibi, N., Nusari, M., Ameen, A., Khalifa, G. S. A., & Bhaumik, A. (2019). Impact of organizational culture on transformational leadership and organizational performance. *International Journal of Recent Technology and Engineering*, *8*(2S10), 653–664. https://doi.org/10.35940/ijrte.b1116.0982s1019

Ando, H., Cousins, R., & Young, C. (2014). Achieving saturation in thematic analysis: Development and refinement of a codebook. *Comprehensive Psychology*, *3*, 03.CP.3.4. https://doi.org/10.2466/03.cp.3.4

Anra, Y., & Yamin, M. (2017). Relationships between lecturer performance, organizational culture, leadership, and achievement motivation. *Foresight and STI Governance*, *11*(2), 92–97. https://doi.org/10.17323/2500-2597.2017.2.92.97

Anvari, R., Irum, S., Shah, I. M., Mahmoodzadeh, N., & Ashfaq, M. (2014). Determinants of information technology leadership program. *Review of European Studies*, *6*(2). https://doi.org/10.5539/res.v6n2p45

Anwar, A., Waqas, A., Shakeel, K., & Hassan, S. S. (2018). Impact of intrinsic and extrinsic motivation on employee's retention: A case from call center. *International Journal of Academic Research in Business and Social Sciences*, *8*(6). https://doi.org/10.6007/ijarbss/v8-i6/4262

Anwar, K., & Balcioglu, H. (2016). The relationship between transformational leadership characteristics and effectiveness: A case study of construction companies in Erbil. *International Journal of Science Technology and Management*, *5*(2).

Aravena, F. (2017). Destructive leadership behavior: An exploratory study in Chile. *Leadership and Policy in Schools*, *18*(1), 83–96. https://doi.org/10.1080/15700763.2017.1384501

Arifin, H. M. (2014). The influence of competence, motivation, and organisational culture to high school teacher job satisfaction and performance. *International Education Studies*, *8*(1). https://doi.org/10.5539/ies.v8n1p38

Arora, B., & Rahman, Z. (2017). Information technology capability as competitive advantage in emerging markets. *International Journal of Emerging Markets*, *12*(3), 447–463. https://doi.org/10.1108/ijoem-07-2015-0127

Aryani, R., & Widodo, W. (2020). The determinant of organizational culture and its impact on organization: A conceptual framework. *International Journal of Higher Education*, *9*(3), 64. https://doi.org/10.5430/ijhe.v9n3p64

Asiamah, N., Mensah, H., & Oteng-Abayie, E. F. (2017). General, target, and accessible population: Demystifying the concepts for effective sampling. *The Qualitative Report*, *22*(6). https://doi.org/10.46743/2160-3715/2017.2674

Avolio, B. J., & Bass, B. M. (1995). Individual consideration viewed at multiple levels of analysis: A multi-level framework for examining the diffusion of transformational leadership. *The Leadership Quarterly*, *6*(2), 199–218. https://doi.org/10.1016/1048-9843(95)90035-7

Avolio, B. J., Bass, B. M., & Jung, D. I. (1999). Re-examining the components of transformational and transactional leadership using the Multifactor Leadership. *Journal*

of Occupational and Organizational Psychology, *72*(4), 441–462. https://doi.org/10.1348/096317999166789

Avolio, B. J., Walumbwa, F. O., & Weber, T. J. (2009). Leadership: Current theories, research, and future directions. *Annual Review of Psychology*, *60*(1), 421–449. https://doi.org/10.1146/annurev.psych.60.110707.163621

Avota, S., McFadzean, E., & Peiseniece, L. (2015). Linking personal and organisational values and behaviour to corporate sustainability: A conceptual model. *Journal of Business Management*, *10*.

Aydin, B. (2018). The role of organizational culture on leadership styles. *MANAS Journal of Social Studies*, *7*(1).

Baesu, C. (2018). Leadership based on emotional intelligence in modern organizations. *The USV Annals of Economics and Public Administration*, *18*(2), 73–78.

Banker, R. D., & Kemerer, C. F. (1989). Scale economies in new software development. *IEEE Transactions on Software Engineering*, *15*(10), 1199–1205. https://doi.org/10.1109/tse.1989.559768

Banks, G. C., McCauley, K. D., Gardner, W. L., & Guler, C. E. (2016). A meta-analytic review of authentic and transformational leadership: A test for redundancy. *The Leadership Quarterly*, *27*(4), 634–652. https://doi.org/10.1016/j.leaqua.2016.02.006

Bass, B., & Avolio, B. (1993). Transformational leadership and organizational culture. *Public Administration Quarterly*, 112–121.

Bass, B., & Avolio, B. (2004). *MLQ - multifactor leadership questonnaire*. Mind Garden.

Bass, B. M. (1985). Leadership: Good, better, best. *Organizational Dynamics*, *13*(3), 26–40. https://doi.org/10.1016/0090-2616(85)90028-2

Bass, B. M. (1990). From transactional to transformational leadership: Learning to share the vision. *Organizational Dynamics*, *18*(3), 19–31. https://doi.org/10.1016/0090-2616(90)90061-s

Bass, B. M. (1999). Two decades of research and development in transformational leadership. *European Journal of Work and Organizational Psychology*, *8*(1), 9–32. https://doi.org/10.1080/135943299398410

Bass, B. M. (2008). *The Bass handbook of leadership : Theory, research, and managerial applications* (4th ed.). Simon & Schuster.

Bass, B. M., Avolio, B. J., Jung, D. I., & Berson, Y. (2003). Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology*, *88*(2), 207–218. https://doi.org/10.1037/0021-9010.88.2.207

Bass, B. M., & Riggio, R. E. (2006). *Transformational Leadership* (2nd ed.). Routledge.

Bass, B. M., & Steidlmeier, P. (1999). Ethics, character, and authentic transformational leadership behavior. *The Leadership Quarterly*, *10*(2), 181–217. https://www.sciencedirect.com/science/article/pii/S1048984399000168

Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D. (2001). Bad is stronger than good. *Review of General Psychology*, *5*(4), 323–370. https://doi.org/10.1037//1089-2680.5.4.323

Bayram, H., & Dinç, S. (2015). Role of transformational leadership on employee's job satisfaction: The case of private universities in bosnia and herzegovina. *European Researcher*, *93*(4), 270–281. https://doi.org/10.13187/er.2015.93.270

Beck-Tauber, D. (2012). *Transformational leadership: Exploring its functionality*. na.

Belias, D., & Koustelios, A. (2014). Organizational culture and job satisfaction: A review. *International Review of Management and Marketing*, *4*(2), 132–149.

Bennett, D., Hennekam, S., Macarthur, S., Hope, C., & Goh, T. (2019). Hiding gender: How female composers manage gender identity. *Journal of Vocational Behavior*, *113*, 20–32. https://doi.org/10.1016/j.jvb.2018.07.003

Bennett, T. (2009). A study of the management leadership preferred by IT subordinates. *Journal of Organizational Culture*, *13*(2), 1–25.

Berger, R., Romeo, M., Guardia, J., Yepes, M., & Soria, M. A. (2012). Psychometric properties of the spanish human system audit short-scale of transformational leadership. *The Spanish Journal of Psychology*, *15*(1), 367–376. https://doi.org/10.5209/rev_sjop.2012.v15.n1.37343

Berglund, M. (2014). *A study to explore the relationship between leadership and organizational culture in a government organization* [Doctoral Thesis].

Berson, Y., Oreg, S., & Dvir, T. (2008). CEO values, organizational culture and firm outcomes. *Journal of Organizational Behavior*, *29*(5), 615–633. https://doi.org/10.1002/job.499

Bezrukova, K., Thatcher, S. M. B., Jehn, K. A., & Spell, C. S. (2012). The effects of alignments: Examining group faultlines, organizational cultures, and performance. *Journal of Applied Psychology*, *97*(1), 77–92. https://doi.org/10.1037/a0023684

Bhalerao, H., & Kumar, S. (2016). Role of emotional intelligence in leaders on the commitment level of employees: A study in information technology and manufacturing sector in India. *Business Perspectives and Research*, *4*(1), 41–53. https://doi.org/10.1177/2278533715605434

Bhati, A., & Manimala, M. J. (2011). Talent acquisition and retention in social enterprises: Innovations in HR strategies. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.1820643

Bidhokti, H. (2000). Organizational culture, area of creating and symbols. *Ravesh*, *58*, 6–13.

Block, L. (2003). The leadership-culture connection: An exploratory investigation. *Leadership & Organization Development Journal*, *24*(6), 318–334. https://doi.org/10.1108/01437730310494293

Brockett, J. (2007). New managers face trauma. *People Management*, *13*(12).

Brooks, I. (1996). Leadership of a cultural change process. *Leadership & Organization Development Journal*, *17*(5), 31–37. https://doi.org/10.1108/01437739610127496

Bryman, A., & Burgess, R. G. (2002). *Analyzing qualitative data*. Routledge.

Bryson, A. (1999). The impact of employee involvement on small firms' financial performance. *National Institute Economic Review*, *169*, 78–95. https://doi.org/10.1177/002795019916900109

Buchanan, N. T., & Settles, I. H. (2019). Managing (in)visibility and hypervisibility in the workplace. *Journal of Vocational Behavior*, *113*, 1–5. https://doi.org/10.1016/j.jvb.2018.11.001

Buil, I., Martínez, E., & Matute, J. (2019). Transformational leadership and employee performance: The role of identification, engagement and proactive personality. *International Journal of Hospitality Management*, *77*, 64–75. https://doi.org/10.1016/j.ijhm.2018.06.014

Burgess, T. (2016). *Transformational leadership: A great place to begin* (pp. 1–16). Cornwall Leadership Institute.

Burnes, P. (2006). *A study of voluntary turnover among Generation X information technology professionals* [Dissertation].

Burns, G., Kotrba, L., & Denison, D. (2013). Leader–Culture fit: Aligning leadership and corporate culture. *The Wiley-Blackwell Handbook of the Psychology of Leadership, Change, and Organizational Development*, 112–128.

Burns, J. M. (1978). *Leadership*. Harper & Row.

Burrell, D., Aridi, A., & Nobles, C. (2018). *The critical need for formal leadership development programs for cybersecurity and information technology professionals*. 13th International Conference in Cyber Warfare and Security, Washington, DC.

Burton, L. J., & Peachey, J. W. (2014). Organizational culture mediates the relationship between transformational leadership and work outcomes. *Journal of Intercollegiate Sport*, *7*(2), 153–174. https://doi.org/10.1123/jis.7.2.153

Büschgens, T., Bausch, A., & Balkin, D. B. (2013). Organizational culture and innovation: A meta-analytic review. *Journal of Product Innovation Management*, *30*(4), 763–781. https://doi.org/10.1111/jpim.12021

Bycio, P., Hackett, R. D., & Allen, J. S. (1995). Further assessments of Bass's (1985) conceptualization of transactional and transformational leadership. *Journal of Applied Psychology*, *80*(4), 468–478. https://doi.org/10.1037/0021-9010.80.4.468

Cameron, K. S., & Quinn, R. E. (2011). *Diagnosing and changing organizational culture : Based on the competing values framework.* Wiley.

Camps, J., & Rodríguez, H. (2011). Transformational leadership, learning, and employability. *Personnel Review*, *40*(4), 423–442. https://doi.org/10.1108/00483481111133327

Carroll, B., Taylor, S., & Ford, J. (Eds.). (2019). *Leadership: Contemporary critical perspectives*. Sage.

Carter, M. Z., Armenakis, A. A., Feild, H. S., & Mossholder, K. W. (2012). Transformational leadership, relationship quality, and employee performance during continuous incremental organizational change. *Journal of Organizational Behavior*, *34*, 942–958. https://doi.org/10.1002/job.1824

Cascio, W. F., & Montealegre, R. (2016). How technology is changing work and organizations. *Annual Review of Organizational Psychology and Organizational Behavior*, *3*(1), 349–375. https://doi.org/10.1146/annurev-orgpsych-041015-062352

Case, C. R., & Maner, J. K. (2014). Divide and conquer: When and why leaders undermine the cohesive fabric of their group. *Journal of Personality and Social Psychology*, *107*(6), 1033–1050. https://doi.org/10.1037/a0038201

Caudle, S. (2004). Qualitative data analysis. *Handbook of Practical Program Evaluation*, *2*(1), 417–438.

Cerfontyne, K. (2020). *The impact of transformational leadership and job crafting on flourishing at work and in-role performance of information technology professionals* [Thesis].

Chambers, H. (2004). *My way or the highway : The micromanagement survival guide*. Berrett-Koehler Publishers.

Chanaka Kumara, K. R., & George, P. (2020). Impact of perceived transformational leadership on productivity of information technology professionals in sri lanka: Mediating effect of organizational commitment. *Journal of HRM Perspectives*, *5*(2).

Chandler, G. D. (2004). *Organizational and individual factors related to retention of county extension agents employed by Texas Cooperative Extension* [Dissertation].

Chandrasekara, W. (2019). The effect of transformational leadership style on employees job satisfaction and job performance: A case of apparel manufacturing industry in Sri Lanka. *International Journal of Economics, Commerce and Management*, *7*(7), 385–393.

Chang, A., & Huang, T. C. (2005). Relationship between strategic human resource management and firm performance. *International Journal of Manpower*, *26*(5), 434–449. https://doi.org/10.1108/01437720510615125

Chang, S., & Lee, M. (2007). A study on relationship among leadership, organizational culture, the operation of learning organization and employees' job satisfaction. *The Learning Organization*, *14*(2), 155–185. https://doi.org/10.1108/09696470710727014

Chen, L. Y. (2004). Examining the effect of organizational culture and leadership behaviors on organizational commitment, job satisfaction, and job performance at small and middle-sized firms of Taiwan. *Journal of American Academy of Business, Cambridge*, *5*(1/2), 432–438.

Chodkowski, M. (1991). *Relationships between leader characteristics, planned change, and organizational culture in a dynamic manufacturing environment* [Dissertation].

Clance, P. R., & Imes, S. A. (1978). The imposter phenomenon in high achieving women: Dynamics and therapeutic intervention. *Psychotherapy: Theory, Research & Practice*, *15*(3), 241–247. https://doi.org/10.1037/h0086006

Collinson, D. (2017). Critical leadership studies. In A. Bryman, D. Collinson, K. Grint, B. Jackson, & M. Uhl-Bien (Eds.), *The Sage Handbook of Leadership* (Vol. 13, Issue 3, pp. 272–284). Sage. https://doi.org/10.1177/1742715017694559

Collins, P. H. (2000). *Black Feminist Thought: Knowledge, Consciousness, and the Politics of Empowerment*. Routledge.

Colquitt, J. A., Lepine, J. A., & Wesson, M. J. (2015). *Organizational behavior : Improving performance and commitment in the workplace*. Mcgraw-Hill Education.

CompTIA. (2022). *2022 tech industry job market & salary trends analysis | cyberstates by comptia*. Cyberstates.org. https://www.cyberstates.org/

Com, W., & Nikpour, A. (2017). The impact of organizational culture on organizational performance: The mediating role of employee's organizational commitment. *International Journal of Organizational Leadership*, *6*(2017), 65–72.

Conger, J. A. (1990). The dark side of leadership. *Organizational Dynamics*, *19*(2), 44–55. https://doi.org/10.1016/0090-2616(90)90070-6

Conger, J. A., & Kanungo, R. N. (1998). *Charismatic leadership in organizations*. Sage Publications.

Constable, J. F., & Russell, D. W. (1986). The effect of social support and the work environment upon burnout among nurses. *Journal of Human Stress*, *12*(1), 20–26. https://doi.org/10.1080/0097840x.1986.9936762

Corrigan, P. W., Diwan, S., Campion, J., & Rashid, F. (2022). Transformational leadership and the mental health team. *Administration and Policy in Mental Health and Mental Health Services Research Volume*, *30*, 97–108.

Cote, R. (2017). A comparison of leadership theories in an organizational environment. *International Journal of Business Administration*, *8*(5), 28. https://doi.org/10.5430/ijba.v8n5p28

Crespi-Vallbona, M., & Mascarilla-Miro, O. (2018). Job satisfaction. The case of information technology (IT) professionals in Spain. *Universia Business Review*, *15*(2).

Creswell, J. W. (2014). *Research design : Qualitative, quantitative & mixed methods approaches* (4th ed.). Sage.

Creswell, J. W., Hanson, W. E., Clark Plano, V. L., & Morales, A. (2007). Qualitative research designs. *The Counseling Psychologist*, *35*(2), 236–264. https://doi.org/10.1177/0011000006287390

Daft, R. L., Murphy, J., & Wilmott, H. (2017). *Organization theory & design : An international perspective*. Cengage Learning Emea.

Dasgupta, S., & Xiao, L. (2005). The impact of organizational culture on information technology practices and performance. pregancy view project organizational culture and technology use view project. *Association for Information Systems*. AMCIS Proceedings.

Day, D. V., & Lord, R. G. (1988). Executive leadership and organizational performance: Suggestions for a new theory and methodology. *Journal of Management*, *14*(3), 453–464. https://doi.org/10.1177/014920638801400308

Day, D. V., Fleenor, J. W., Atwater, L. E., Sturm, R. E., & McKee, R. A. (2014). Advances in leader and leadership development: A review of 25 years of research and theory. *The Leadership Quarterly*, *25*(1), 63–82. https://doi.org/10.1016/j.leaqua.2013.11.004

Deal, T. E., & Kennedy, A. A. (1982). *Corporate cultures : The rites and rituals of corporate life*. Addison-Wesley.

Deci, E. L., Olafsen, A. H., & Ryan, R. M. (2017). Self-Determination theory in work organizations: The state of a science. *Annual Review of Organizational Psychology and Organizational Behavior*, *4*(1), 19–43. https://doi.org/10.1146/annurev-orgpsych-032516-113108

Dempsey, J. (2015). Moral responsibility, shared values, and corporate culture. *Business Ethics Quarterly*, *25*(3), 319–340. https://doi.org/10.1017/beq.2015.31

Denison, D. R., & Mishra, A. K. (1995). Toward a theory of organizational culture and effectiveness. *Organization Science*, *6*(2), 204–223. https://doi.org/10.1287/orsc.6.2.204

Department of the Army. (2019). *Army leadership and the profession*. United States Army.

Derue, D. S., Nahrgang, J. D., Wellman, N., & Humphrey, S. E. (2011). Trait and behavioral theories of leadership: An integration and meta-analytic test of their relative validity. *Personnel Psychology*, *64*(1), 7–52.

Desai, Prof. D. (2018). A study on linkage between job satisfaction and employee retention. *International Journal for Research in Applied Science and Engineering Technology*, *6*(6), 588–593. https://doi.org/10.22214/ijraset.2018.6092

Deshpandé, R., & Farley, J. U. (2004). Organizational culture, market orientation, innovativeness, and firm performance: An international research odyssey. *International Journal of Research in Marketing*, *21*(1), 3–22. https://doi.org/10.1016/j.ijresmar.2003.04.002

Deveaux, T. A. (2020). *Exploring the relationship between leadership outcomes and organizational culture in american information technology companies*.

Dhingra, G. (2015). Micromanagement - Boon or bane andemployee's perception - with reference to IT sector. *International Journal of Research in Management & Social Science*, *3*(1).

Dinh, J., Lord, R., Garnder, W., Meuser, J., Liden, R., & Hu, J. (2014). Leadership theory and research in the new millennium: Current theoretical trends and changing perspectives. *The Leadership Quarterly*, *25*(1), 36–62. https://doi.org/10.1016/j.leaqua.2013.11.005

Doherty, N. F., & Doig, G. (2003). An analysis of the anticipated cultural impacts of the implemementation of data warehouses. *IEEE Transactions on Engineering Management*, *50*(1), 78–88. https://doi.org/10.1109/tem.2002.808302

Dollard, M. F., & Bakker, A. B. (2010). Psychosocial safety climate as a precursor to conducive work environments, psychological health problems, and employee engagement. *Journal of Occupational and Organizational Psychology*, *83*(3), 579–599. https://doi.org/10.1348/096317909x470690

Doty, J., & Fenlason, J. (2013). *Narcissism and toxic leaders*. ARMY COMBINED ARMS CENTER MILITARY REVIEW.

Druckman, D., Singer, J. E., Van, H. P., & National Research Council (U.S.). Committee On Techniques For The Enhancement Of Human Performance. (1997). *Enhancing organizational performance*. National Academy Press.

Dulkpado, D., Shuvo, H., Pheko, M., Uddin, M., Luva, R., Saad, & Maroof Hossian, M. (2013). Impact of organizational culture on employee performance and productivity: A case study of telecommunication sector in bangladesh. *International Journal of Business and Management*, *8*(2). https://doi.org/10.5539/ijbm.v8n2p63

Dumdum, U. R., Lowe, B. K., & Avolio, B. J. (2002). Meta-analysis of transformational and transactional leadership correlates of effectiveness and satisfaction: An update and extension. In B. J. Avolio (Ed.), *Transformational and charismatic leadership: The road ahead*. JAI Press.

Dzameshie, D. (2012). *Leadership in project management: The behaviors of successful male project managers in information technology* [Dissertation].

Eich, R. K. (2012). Leadership shortcomings: A values deficit. *The Journal of Values-Based Leadership*, *5*(2).

Einarsen, S., Hoel, H., & Notelaers, G. (2009). Measuring exposure to bullying and harassment at work: Validity, factor structure and psychometric properties of the negative acts questionnaire-revised. *Work & Stress*, *23*(1), 24–44. https://doi.org/10.1080/02678370902815673

Elkordy, M. (2013). Transformational leadership and organizational culture as predictors of employees attitudinal outcomes. *Business Management Dynamics*, *3*(5), 15–26.

Engelbrecht, A. S., Heine, G., & Mahembe, B. (2015). The influence of integrity and ethical leadership on trust in the leader. *Management Dynamics*, *24*(1), 2–10.

Erez, M., & Gati, E. (2004). A dynamic, multi-level model of culture: From the micro level of the individual to the macro level of a global culture. *Applied Psychology*, *53*(4), 583–598. https://doi.org/10.1111/j.1464-0597.2004.00190.x

Erkutlu, H. (2008). The impact of transformational leadership on organizational and leadership effectiveness. *Journal of Management Development*, *27*(7), 708–726. https://doi.org/10.1108/02621710810883616

Ertosun, O. G., & Adiguzel, Z. (2018). Leadership, personal values and organizational culture. In H. Dincer, U. Hacioglu, & S. Yuksel (Eds.), *Contributions to Management Science* (pp. 51–74). Springer. https://doi.org/10.1007/978-3-319-77622-4_3

Ertürk, A., & Vurgun, L. (2015). Retention of IT professionals: Examining the influence of empowerment, social exchange, and trust. *Journal of Business Research*, *68*(1), 34–46. https://doi.org/10.1016/j.jbusres.2014.05.010

Euchner, J. (2017). Creating a culture of innovation. *Research-Technology Management*, *60*(6), 10–11. https://doi.org/10.1080/08956308.2017.1373043

Fanggidae, R. E., Nursiani, N. P., & Bengngu, A. (2019). The influence of reward on organizational commitment towards spirituality workplace as a moderating variable. *GATR Journal of Management and Marketing Review (JMMR) Vol. 4 (4) Oct-Dec 2019*, *4*(4), 260–269. https://doi.org/10.35609/jmmr.2019.4.4(5)

Fareed, M. Z., Su, Q., & Awan, A. A. (2021). The effect of emotional intelligence, intellectual intelligence and transformational leadership on project success; an empirical study of public projects of Pakistan. *Project Leadership and Society*, *2*, 100036. https://doi.org/10.1016/j.plas.2021.100036

Farooq, S., & Hanif, N. (2013). A descriptive study of intrinsic and extrinsic motivational factors and their role in employee retention in banking sector (Lahore) Pakistan. *International Journal of Innovative and Applied Finance*, *1*(1).

Fernando, D., Cohen, L., & Duberley, J. (2019). Navigating sexualised visibility: A study of British women engineers. *Journal of Vocational Behavior*, *113*, 6–19. https://doi.org/10.1016/j.jvb.2018.06.001

Fiedler, F. E. (1996). Research on leadership selection and training: One view of the future. *Administrative Science Quarterly*, *41*(2), 241. https://doi.org/10.2307/2393716

Fisher, C. J. (2000). Like it or not ... culture matters. *Employment Relations Today*, *27*(2), 43–52. https://doi.org/3.0.co;2-8">10.1002/1520-6459(200022)27:2<43::aid-ert5>3.0.co;2-8

Flick, U. (2018). *Designing qualitative research*. Sage.

Gagliardi, P. (1992). *Symbols and artifacts : Views of the corporate landscape*. Aldine De Gruyter.

Galletta, A. (2013). *Mastering the semi-structured interview and beyond: From research design to analysis and publication*. New York University Press.

Garcia, I. (2014). Emergent leadership: Is e-leadership importance in the quality of virtual education? *RIED. Revista Iberoamericana de Educación a Distancia*, *18*(1). https://doi.org/10.5944/ried.18.1.13798

Gemeda, H. K., & Lee, J. (2020). Leadership styles, work engagement and outcomes among information and communications technology professionals: A cross-national study. *Heliyon*, *6*(4), e03699. https://doi.org/10.1016/j.heliyon.2020.e03699

Ghasabeh, M. (2020). Transformational leadership, information technology, knowledge management, firm performance: How are they linked? *Journal of Values-Based Leadership*, *13*(2). https://doi.org/10.22543/0733.132.1317

Glen, P. (2003). *Leading geeks: How to manage and lead people who deliver technology*. Jossey-Bass.

Golden, J. H., & Shriner, M. (2017). Examining relationships between transformational leadership and employee creative performance: The moderator effects of organizational culture. *The Journal of Creative Behavior*, *53*(3), 363–376. https://doi.org/10.1002/jocb.216

Gomez, R. A. (2012). *Leadership effects on organizational culture in a performance-based business environment* [Dissertation]. https://www.proquest.com/pqdtglobal/docview/1112071643/BE7879CEBD04416BPQ/1?accountid=38107

Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *The Leadership Quarterly*, *6*(2), 219–247.

Graham, C. M., & Muyia Nafukho, F. (2007). Culture, organizational learning and selected employee background variables in small-size business enterprises. *Journal of European Industrial Training*, *31*(2), 127–144. https://doi.org/10.1108/03090590710734354

Grenny, J., & Maxfield, D. (2017, April 21). *Leaders need different skills to thrive in tech*. Harvard Business Review. https://hbr.org/2016/10/leaders-need-different-skills-to-thrive-in-tech

Griffith, J. (2004). Relation of principal transformational leadership to school staff job satisfaction, staff turnover, and school performance. *Journal of Educational Administration*, *42*(3), 333–356. https://doi.org/10.1108/09578230410534667

Groysberg, B., Lee, J., Price, J., & Yo-Jud Cheng, J. (2018). The leader's guide to corporate culture. *Harvard Business Review*, *96*.

Guha, S., & Chakrabarti, S. (2014). Employee turnover: A study on information technology sector. *Journal of Business Management*, *20*(2), 71–89.

Hadadian, Z., & Zarei, J. (2016). Relationship between Toxic Leadership and Job Stress of Knowledge Workers. *Studies in Business and Economics*, *11*(3), 84–89. https://doi.org/10.1515/sbe-2016-0037

Hall, B. P. (2001). Values development and learning organizations. *Journal of Knowledge Management*, *5*(1), 19–32. https://doi.org/10.1108/13673270110384374

Hammond, H. G., & Waltemeyer, S. (2021). Policies and procedures that may hinder morale, motivation, and engagement. In *Handbook of research on inclusive development for remote adjunct faculty in higher education* (pp. 233–252). IGI Global.

Harden, G., Boakye, K. G., & Ryan, S. (2016). Turnover intention of technology professionals: A social exchange theory perspective. *Journal of Computer Information Systems*, *58*(4), 291–300. https://doi.org/10.1080/08874417.2016.1236356

Harper, G. R., & Utley, D. R. (2001). Organizational culture and successful information technology implementation. *Engineering Management Journal*, *13*(2), 11–15. https://doi.org/10.1080/10429247.2001.11415111

Harter, J., Buckingham, M., & Gallup Organization. (2016). *First, break all the rules: what the world's greatest managers do differently*. Gallup Press.

Hartmann, A. (2006). The role of organizational culture in motivating innovative behaviour in construction firms. *Construction Innovation*, *6*(3), 159–172. https://doi.org/10.1108/14714170610710712

Hartnell, C. A., & Walumba, F. O. (2010). Transformational leadership and organizational culture: Toward integrating a multilevel framework. In N. M. Ashkanasy, C. P. Wilderom, & M. F. Peterson (Eds.), *Handbook of Organizational Culture and Climate* (pp. 225–248). Sage.

Hartnell, C. A., Kinicki, A. J., Lambert, L. S., Fugate, M., & Doyle Corner, P. (2016). Do similarities or differences between CEO leadership and organizational culture have a more positive effect on firm performance? A test of competing predictions. *Journal of Applied Psychology*, *101*(6), 846–861. https://doi.org/10.1037/apl0000083

Hartnell, C. A., Ou, A. Y., & Kinicki, A. (2011). Organizational culture and organizational effectiveness: A meta-analytic investigation of the competing values framework's theoretical suppositions. *Journal of Applied Psychology*, *96*(4), 694–694. https://doi.org/10.1037/a0023086

Hatch, M. J. (1993). The dynamics of organizational culture. *The Academy of Management Review*, *18*(4), 657–693. https://doi.org/10.2307/258594

Hater, J. J., & Bass, B. M. (1988). Superiors' evaluations and subordinates' perceptions of transformational and transactional leadership. *Journal of Applied Psychology*, *73*(4), 695–702. https://doi.org/10.1037/0021-9010.73.4.695

Heppell, T. (2011). Toxic Leadership: Applying the Lipman-Blumen model to political leadership. *Representation*, *47*(3), 241–249. https://doi.org/10.1080/00344893.2011.596422

Herzberg, F. (1965). The new industrial psychology. *Industrial and Labor Relations Review*, *18*(3), 364. https://doi.org/10.2307/2520909

Herzberg, F., Mausner, B., & Synderman, B. (1959a). *The motivation to work*. Wiley.

Herzberg, F., Mausner, B., & Synderman, B. (1959b). *The motivation to work*. Wiley.

Hetland, H., Sandal, G. M., & Johnsen, T. B. (2007). Burnout in the information technology sector: Does leadership matter? *European Journal of Work and Organizational Psychology*, *16*(1), 58–75. https://doi.org/10.1080/13594320601084558

Hickman, L., & Akdere, M. (2018). Effective leadership development in information technology: Building transformational and emergent leaders. *Industrial and Commercial Training*, *50*(1), 1–9. https://doi.org/10.1108/ict-06-2017-0039

Hladio, M., & Edwards, R. (2017). *Developing leaders: Why traditional leadership training misses the mark*. Morgan James Publishing.

Hofstede, G. (2011). Dimensionalizing cultures: The Hofstede model in context. *Online Readings in Psychology and Culture, Unit 2*, *2*(8), 1–26.

Hogan, S. J., & Coote, L. V. (2014). Organizational culture, innovation, and performance: A test of Schein's model. *Journal of Business Research*, *67*(8), 1609–1621. https://doi.org/10.1016/j.jbusres.2013.09.007

Hollingworth, H. L., & Poffenberger, A. T. (1917). *The sense of taste*. Moffat, Yard.

House, R. (1976). A 1976 theory of charismatic leadership. *University of Toronto - Faculty of Management Studies*, *77*(1), 1–34.

House, R. J., & Howell, J. M. (1992). Personality and charismatic leadership. *The Leadership Quarterly*, *3*(2), 81–108. https://doi.org/10.1016/1048-9843(92)90028-e

Howell, J. M., & Avolio, B. J. (1993). Transformational leadership, transactional leadership, locus of control, and support for innovation: Key predictors of consolidated-business-unit performance. *Journal of Applied Psychology*, *78*(6), 891–902. https://doi.org/10.1037//0021-9010.78.6.891

Huang, I.-C., Chuang, C.-H. J., & Lin, H.-C. (2003). The role of burnout in the relationship between perceptions of organizational politics and turnover intentions. *Public Personnel Management*, *32*(4), 519–531.

Hughes, L. W., Avey, J. B., & Nixon, D. R. (2010). Relationships between leadership and followers' quitting intentions and job search behaviors. *Journal of Leadership & Organizational Studies*, *17*(4), 351–362. https://doi.org/10.1177/1548051809358698

Hunt, J. G. (1991). *Leadership: Towards paradigm expansion.* Sage Publications.

Hur, W.-M., Moon, T., & Jun, J.-K. (2016). The effect of workplace incivility on service employee creativity: The mediating role of emotional exhaustion and intrinsic motivation. *Journal of Services Marketing*, *30*(3), 302–315. https://doi.org/10.1108/jsm-10-2014-0342

Iivari, N. (2018). Using member checking in interpretive research practice: A hermeneutic analysis of informants' interpretation of their organizational realities. *Information Technology & People*, *31*(1), 111–133. https://doi.org/10.1108/itp-07-2016-0168

Iqbal, S., Hongyun, T., Akhtar, S., Ahmad, U., & Ankomah, F. N. (2020). Impacts of supervisor support on turnover intentions: Mediating role of job satisfaction. *Asian Journal of Education and Social Studies*, *6*(3), 1–9.

Irshad, R., Hashmi, M., Arshad, S., & Akram, S. (2014). Does managers' emotional intelligence impact employees' performance? Assessing mediating role of transformational leadership. *J. Basic. Appl. Sci. Res*, *4*(5), 6–12.

Isac, N., Dobrin, C., Raphalalani, L., & Sonko, M. (2021). Does organizational culture influence job satisfaction? A comparative analysis of two multinational companies. *Review of International Comparative Management*, *22*(2). https://doi.org/10.24818/RMCI.2021.2.138

Jacobs, T. O., & Jacques, E. (1987). Leadership in complex systems. *Human Productivity Enhancement*, *2*, 7–65.

Jamal Ali, B., & Anwar, G. (2021). An empirical study of employees' motivation and its influence job satisfaction. *International Journal of Engineering, Business and Management*, *5*(2), 21–30. https://doi.org/10.22161/ijebm.5.2.3

Jeni, F. A., Mutsuddi, P., Das, S., & Momotaj. (2020). The impact of rewards on employee performance: A study of commercial banks in noakhali region. *Journal of Economics, Management and Trade*, *26*(9), 28–43. https://doi.org/10.9734/jemt/2020/v26i930289

Jigjiddorj, S., Zanabazar, A., Jambal, T., & Semjid, B. (2021). Relationship Between Organizational Culture, Employee Satisfaction and Organizational Commitment. *SHS Web of Conferences*, *90*, 02004. https://doi.org/10.1051/shsconf/20219002004

Joseph, O. O., & Francis, K. (2015). The influence of organizational culture and market orientation on performance of microfinance institutions in Kenya. *International Journal of Business and Management*, *10*(8). https://doi.org/10.5539/ijbm.v10n8p204

Judge, T. A., & Piccolo, R. F. (2004). Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology*, *89*(5), 755–768. https://doi.org/10.1037/0021-9010.89.5.755

Kahlke, R. M. (2014). Generic qualitative approaches: Pitfalls and benefits of methodological mixology. *International Journal of Qualitative Methods*, *13*(1), 37–52. https://doi.org/10.1177/160940691401300119

Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, *33*(4), 692–724. https://journals.aom.org/doi/abs/10.5465/256287

Kaiser, R. B., & Craig, S. B. (2011). Do the behaviors related to managerial effectiveness really change with organizational level? An empirical test. *The Psychologist-Manager Journal*, *14*(2), 92–119. https://doi.org/10.1080/10887156.2011.570140

Kakabadse, A., & Korac-Kakabadse, N. (2000). Leading the pack: Future role of IS/IT professionals. *Journal of Management Development*, *19*(2), 97–155. https://doi.org/10.1108/02621710010312815

Kallschmidt, A. M., & Eaton, A. A. (2019). Are lower social class origins stigmatized at work? A qualitative study of social class concealment and disclosure among white men employees who experienced upward mobility. *Journal of Vocational Behavior*, *113*, 115–128. https://doi.org/10.1016/j.jvb.2018.08.010

Kappelman, L., Jones, M., Johnson, V., Mclean, E., & Boonme, K. (2016). Skills for success at different stages of an IT professional's career. *Communications of the ACM*, *59*(8). https://doi.org/10.1145/2888391

Karahanna, E., Evaristo, J. R., & Srite, M. (2005). Levels of culture and individual behavior. *Journal of Global Information Management*, *13*(2), 1–20. https://doi.org/10.4018/jgim.2005040101

Karaminia, R., Salimi, S. H., & Amini, A. (2010). Relation between leadership style and organizational culture and commitment in military forces. *Iranian Journal of Military Medicine*, *12*(2), 65–70.

Kargas, A. D., & Varoutas, D. (2015). On the relation between organizational culture and leadership: An empirical analysis. *Cogent Business & Management*, *2*(1), 1055953. https://doi.org/10.1080/23311975.2015.1055953

Kark, K. (2019). *IT culture: From business limitation to competitive advantage*. https://www2.deloitte.com/us/en/pages/chief-information-officer/articles/high-performing-it-culture.html

Khan, H., Rehmat, M., Butt, T. H., Farooqi, S., & Asim, J. (2020). Impact of transformational leadership on work performance, burnout and social loafing: A mediation model. *Future Business Journal*, *6*(1). https://doi.org/10.1186/s43093-020-00043-8

Klein, H. K., & Myers, M. D. (1999). A set of principles for conducting and evaluating interpretive field studies in information systems. *MIS Quarterly*, *23*(1), 67. https://doi.org/10.2307/249410

Kleinman, C. S. (2004). Leadership and retention. *JONA: The Journal of Nursing Administration*, *34*(3), 111–113. https://doi.org/10.1097/00005110-200403000-00001

Klimoski, R. (2012). Context matters. *Industrial and Organizational Psychology*, *5*(1), 28–32. https://doi.org/10.1111/j.1754-9434.2011.01398.x

Korsakienė, R., Stankevičienė, A., Šimelytė, A., & Talačkienė, M. (2014). Factors driving turnover and retention of information technology professionals. *Journal of Business Economics and Management*, *16*(1), 1–17. https://doi.org/10.3846/16111699.2015.984492

Kotter, J. P., & Heskett, J. L. (1992). *Corporate culture and performance*. Free Press.

Krisnanda, P. H., & Surya, I. B. K. (2019). Effect of emotional and spiritual intelligence on transformational leadership and impact on employee performance. *International Research Journal of Management, IT and Social Sciences*, *6*(3), 70–82. https://doi.org/10.21744/irjmis.v6n3.634

Kumari, G., & Pandey, K. M. (2011). Job satisfaction in public sector and private sector: A comparison. *International Journal of Innovation, Management and Technology*, *2*(3), 222–228.

Kumar, M. P. (2014). Information technology: Roles, advantages and disadvantages. *International Journal of Advanced Research in Computer Science and Software Engineering*, *4*(6), 1020–1024.

Kuvaas, B., & Dysvik, A. (2010). Exploring alternative relationships between perceived investment in employee development, perceived supervisor support and employee outcomes. *Human Resource Management Journal*, *20*(2), 138–156. https://doi.org/10.1111/j.1748-8583.2009.00120.x

Labrague, L. J., Nwafor, C. E., & Tsaras, K. (2020). Influence of toxic and transformational leadership practices on nurses' job satisfaction, job stress, absenteeism and turnover intention: A cross-sectional study. *Journal of Nursing Management*, *28*(5), 1104–1113. https://doi.org/10.1111/jonm.13053

Lacity, M. C., Iyer, V. V., & Rudramuniyaiah, P. S. (2008). Turnover intentions of Indian IS professionals. *Information Systems Frontiers*, *10*(2), 225–241. https://doi.org/10.1007/s10796-007-9062-3

Ladelsky, L. K., & Catană, G. A. (2013). Causes affecting voluntary turnover in IT sector. Review of some empirical studies. *International Conference " Marketing - from Information to Decision"*.

Lam, L., Nguyen, P., Le, N., & Tran, K. (2021). The relation among organizational culture, knowledge management, and innovation capability: Its implication for open innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, *7*(1), 66. https://doi.org/10.3390/joitmc7010066

Lee, J., Lee, H., & Park, J.-G. (2014). Exploring the impact of empowering leadership on knowledge sharing, absorptive capacity and team performance in IT service. *Information Technology & People*, *27*(3), 366–386. https://doi.org/10.1108/itp-10-2012-0115

Lee, K., & Cho, W. (2018). The relationship between transformational leadership of immediate superiors, organizational culture, and affective commitment in fitness club employees. *Sport Mont*, *16*(1), 15–19. https://doi.org/10.26773/smj.180203

Lester, D. L., & Tran, T. T. (2008). Information technology capabilities: Suggestions for SME growth. *Journal of Behavioral and Applied Management*, *10*(1). https://doi.org/10.21818/001c.17169

Levinson, H. (1965). Reciprocation: The relationship between man and organization. *Administrative Science Quarterly*, *9*(4), 370. https://doi.org/10.2307/2391032

Lewin, K. (1951). The nature of field theory. *Psychological Theory*.

Lewin, K., Lippitt, R., & White, R. K. (1939). Patterns of aggressive behavior in experimentally created "social climates." *The Journal of Social Psychology*, *10*(2), 269–299. https://doi.org/10.1080/00224545.1939.9713366

Li, H., Sajjad, N., Wang, Q., Muhammad Ali, A., Khaqan, Z., & Amina, S. (2019). Influence of transformational leadership on employees' innovative work behavior in sustainable organizations: Test of mediation and moderation processes. *Sustainability*, *11*(6), 1594. https://doi.org/10.3390/su11061594

Limsila, K., & Ogunlana, S. O. (2008). Performance and leadership outcome correlates of leadership styles and subordinate commitment. *Engineering, Construction and Architectural Management*, *15*(2), 164–184. https://doi.org/10.1108/09699980810852682

Lindgreen, A., & Di Benedetto, A. (2018). Citation classics from Industrial Marketing Management: Celebrating forty-seven years of publications on business-to-business marketing management. *Industrial Marketing Management*, *73*(August), 1–6. https://doi.org/10.1016/j.indmarman.2017.10.003

Lin, H.-E., McDonough, E. F., Lin, S.-J., & Lin, C. Y.-Y. (2012). Managing the exploitation/exploration paradox: The role of a learning capability and innovation ambidexterity. *Journal of Product Innovation Management*, *30*(2), 262–278. https://doi.org/10.1111/j.1540-5885.2012.00998.x

Li, T. (2015). *Organizational culture & employee behavior: Case study* [Thesis].

Li, T., & Chan, Y. E. (2019). Dynamic information technology capability: Concept definition and framework development. *The Journal of Strategic Information Systems*, *28*(4), 101575. https://doi.org/10.1016/j.jsis.2019.101575

Litwin, G., & Stringer, R. (1968). Motivation and organizational climate. *Harvard University*.

Liu, H., Ke, W., Wei, K. K., & Hua, Z. (2014). The impact of IT capabilities on firm performance: The mediating roles of absorptive capacity and supply chain agility. *SSRN Electronic Journal*, *5*(3). https://doi.org/10.2139/ssrn.2444360

Locke, E. A. (1969). What is job satisfaction? *Organizational Behavior and Human Performance*, *4*(4), 309–336. https://doi.org/10.1016/0030-5073(69)90013-0

Loke, J. C. F. (2001). Leadership behaviours: Effects on job satisfaction, productivity and organizational commitment. *Journal of Nursing Management*, *9*(4), 191–204. https://doi.org/10.1046/j.1365-2834.2001.00231.x

Lo, M.-C., Ramayah, T., Min, H. W., & Songan, P. (2010). The relationship between leadership styles and organizational commitment in Malaysia: role of leader–member exchange.

Asia Pacific Business Review, *16*(1-2), 79–103. https://doi.org/10.1080/13602380903355676

Long, C. S., Yusof, W. M. M., Kowang, T. O., & Heng, L. H. (2017). The impact of transformational leadership style on job satisfaction. *World Applied Sciences Journal*, *29*(1), 117–124. https://doi.org/10.5829/idosi.wasj.2014.29.01.1521

Lounsbury, J. W., Moffitt, L., Gibson, L. W., Drost, A. W., & Stevens, M. (2007). An investigation of personality traits in relation to job and career satisfaction of information technology professionals. *Journal of Information Technology*, *22*(2), 174–183. https://doi.org/10.1057/palgrave.jit.2000094

Lounsbury, J. W., Sundstrom, E., Levy, J. J., & Gibson, L. W. (2014). Distinctive personality traits of information technology professionals. *Computer and Information Science*, *7*(3). https://doi.org/10.5539/cis.v7n3p38

Lumley, E. J., Coetzee, M., Tladinyane, R., & Ferreira, N. (2011). Exploring the job satisfaction and organisational commitment of employees in the information technology environment. *Southern African Business Review*, *15*(1).

Luthans, F., & Stajkovic, A. (1999). Reinforce for performance: The need to go beyond pay and even rewards. *The Academy of Management Executive*, *13*(2), 49–57.

Mahal, P. K. (2009). Organizational culture and organizational climate as a determinant of motivation. *IUP Journal of Management Research*, *8*(10).

Mamatha, S., & Geetanjali, P. (2020). Founder leaders and organization culture: A comparative study on indian and american founder leaders based on schein's model of organizational culture. *IIM Kozhikode Society & Management Review*, *9*(1), 23–33. https://doi.org/10.1177/2277975219890932

Marcoulides, G. A., & Heck, R. H. (1993). Organizational culture and performance: Proposing and testing a model. *Organization Science*, *4*(2), 209–225. https://doi.org/10.1287/orsc.4.2.209

Martin, A., & Roodt, G. (2008). Perception of organisational commitment, job satisfaction and turnover intentions in a post-merger South African tertiary institution. *SA Journal of Industrial Psychology*, *34*(1). https://doi.org/10.4102/sajip.v34i1.415

Martinez-Simarro, D., Devece, C., & Llopis-Albert, C. (2015). How information systems strategy moderates the relationship between business strategy and performance. *Journal of Business Research*, *68*(7), 1592–1594. https://doi.org/10.1016/j.jbusres.2015.01.057

Maseko, T. (2020). Strong vs. weak organizational culture: Assessing the impact on employee motivation. *Arabian Journal of Business and Management Review*, *7*(1), 1–5. https://doi.org/10.4172/2223-5833.1000287

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, *50*(4), 370–396. https://doi.org/10.1037/h0054346

Masrek, M., Akmal, M., Osman, F., Khamis, Y., & Paiman, M. (2014). International journal of multidisciplinary and current research the relationship between emotional intelligence and job satisfaction: The case of Malaysian information technology professionals. *International Journal of Multidisciplinary and Current Research*, *2*.

McCalister, D. V., Katz, D., & Kahn, R. L. (1967). The Social Psychology of organizations. *Social Forces*, *46*(1), 118. https://doi.org/10.2307/2575337

McCarty, K. (2019, February 19). Why the Technology Leadership Gap Matters to You. *LInked In*. https://www.linkedin.com/pulse/why-technology-leadership-gap-matters-you-kevin-mccarty/

McGuire, E., & Kennerley, S. M. (2006). Nurse managers as transformational and transactional leaders. *Nursing Economics*, *24*(4).

McKinnon, J., Harrison, G., Chow, C., & Wu, A. (2003). Organizational culture: Association with commitment, job satisfaction, propensity to remain, and information sharing in Taiwan. *International Journal of Business Studies*, *11*(1), 25–44.

Mclean, E., & Smits, S. (2014). Management, leadership, and the roles of the CIO. *International Leadership Journal*, *6*(1), 3–23.

Mehta, S., & Maheshwari, G. (2013a). Consequence of toxic leadership on employee job satisfaction and organizational commitment. *The Journal of Contemporary Management Research*, *8*(2), 1–23.

Mehta, S., & Maheshwari, G. (2013b). Consequence of toxic leadership on employee job satisfaction and organizational commitment. *The Journal of Contemporary Management Research*, *8*(2), 1–23.

Messner, W. (2013). Effect of organizational culture on employee commitment in the Indian IT services sourcing industry. *Journal of Indian Business Research*, *5*(2), 76–100. https://doi.org/10.1108/17554191311320764

Mesu, J., Sanders, K., & Riemsdijk, M. van. (2015). Transformational leadership and organisational commitment in manufacturing and service small to medium-sized enterprises. *Personnel Review*, *44*(6), 970–990. https://doi.org/10.1108/pr-01-2014-0020

Mitonga-Monga, J., & Coatzee, M. (2012). Perceived leadership style and employee participation. *African Journal of Business Management*, *6*(15). https://doi.org/10.5897/ajbm11.2443

Mittal, R. (2015). Charismatic and transformational leadership styles: A cross-cultural perspective. *International Journal of Business and Management*, *10*(3). https://doi.org/10.5539/ijbm.v10n3p26

Mohammad, F., Teck Chai, L., Kian Aun, L., Migin, M., Tunku, U., & Rahman, A. (2014). Emotional intelligence and turnover intention. *International Journal of Academic Research Part B*, *6*(4), 211–220. https://doi.org/10.7813/2075-4124.2014/6-4/B.33

Munro, Z. (2015). Work-life balance, job satisfaction and turnover intention amongst information technology employees [Dissertation]. In *Southern African Business Review* (Vol. 20, Issue 1). https://doi.org/10.25159/1998-8125/6059

Münsterberg, H. (1928). *The acquirement of abilities*.

Muratović, H. (2013). Building competitive advantage of the company based on changing organizational culture. *Economic Review -Journal of Economics and Business*, *XI*(1).

Naeem, F., & Khurram, S. (2020). Influence of toxic leadership on turnover intention: The mediating role of psychological wellbeing and employee engagement. *Pakistan Journal of Commerce and Social Sciences*, *14*(3), 682–713.

Nafei, W. A. (2016). Organizational ambidexterity as a mediating variable between psychological capital and strategic success: An applied study. *Case Studies Journal*, *8*(11).

Nam Nguyen, H., & Mohamed, S. (2011). Leadership behaviors, organizational culture and knowledge management practices. *Journal of Management Development*, *30*(2), 206–221. https://doi.org/10.1108/02621711111105786

Naqshbandi, M. M., Kaur, S., Sehgal, R., & Subramaniam, I. D. (2015). Organizational culture profile of Malaysian high-tech industries. *Asia-Pacific Journal of Business Administration*, *7*(1), 2–19. https://doi.org/10.1108/apjba-08-2013-0088

Nasir, M. (2021). *Transformational leadership and job satisfaction in IT software industry: A case study of one medium size IT software company in Karachi, Pakistan.*

Nasomboon, B. (2014). The relationship among leadership commitment, organizational performance, and employee engagement. *International Business Research*, *7*(9). https://doi.org/10.5539/ibr.v7n9p77

Nohria, N., Groysberg, B., & Lee, L.-E. (2008). Employee motivation A powerful new model. *Harvard Business Review*, *86*(7), 78–84.

Oberer, B., & Erkollar, A. (2018). Leadership 4.0: Digital leaders in the age of industry 4.0. *International Journal of Organizational Leadership*, *7*(4), 404–412. https://doi.org/10.33844/ijol.2018.60332

Olagundoye, E. O. (2019). *Emotional intelligence and leadership styles: Exploring the relationship between emotional intelligence and leadership styles among information technology professionals*. Dissertation.com.

Oltsik, J. (2017). *The life and times of cybersecurity professionals: A cooperative research project by ESG and ISSA*. Enterprise Strategy Group.

Onday, O. (2016). Organization culture theory: From organizational culture of Schein to appreciative inquiry of Cooperrider & Whitney. *Elixir Organizational Bevaviour*, *92*, 39002–39008.

Ostroff, C., Kinicki, A., & Muhammad, R. (2012). Organizational culture and climate. In *Handbook of Psychology* (pp. 643–676). John Wiley & Sons.

Paais, M., & Pattiruhu, J. R. (2020). Effect of motivation, leadership, and organizational culture on satisfaction and employee performance. *The Journal of Asian Finance, Economics and Business*, *7*(8), 577–588. https://doi.org/10.13106/jafeb.2020.vol7.no8.577

Pajo, B. (2018). *Introduction to research methods: A hands-on approach*. Sage.

Paré, G., & Tremblay, M. (2007). The influence of high-involvement human resources practices, procedural justice, organizational commitment, and citizenship behaviors on information technology professionals' turnover intentions. *Group & Organization Management*, *32*(3), 326–357. https://doi.org/10.1177/1059601106286875

Park, R. (1928). Human Migration and the Marginal. *Source: American Journal of Sociology*, *33*(6), 881–893.

Parry, K. W., & Proctor-Thomson, S. B. (2002). Perceived integrity of transformational leaders in organisational settings. *Journal of Business Ethics*, *35*(2), 75–96.

Pathiranage, Y. (2019). Organizational culture and business performance: An empirical study. *International Journal of Economics and Management Studies*, *6*(6), 1–12. https://doi.org/10.14445/23939125/ijems-v6i6p101

Patrick, A. H. (2018). Impact of leadership strategies of managers on employees in information technology organizations. *Contemporary Management Research*, *12*(1), 1–13.

Payne, R. L., Fineman, S., & Wall, T. D. (1976). Organizational climate and job satisfaction: A conceptual synthesis. *Organizational Behavior and Human Performance*, *16*.

Peacock, D., & Irons, A. (2017). Gender inequalities in cybersecurity: Exploring the gender gap in opportunities and progression. *International Journal of Gender, Science and Technology*, *9*(1), 25–44.

Pelletier, K. L. (2010). Leader toxicity: An empirical investigation of toxic behavior and rhetoric. *Leadership*, *6*(4), 373–389. https://doi.org/10.1177/1742715010379308

Penava, S., & Sehic, D. (2014). The relevance of transformational leadership in shaping employee attitudes towards organizational change. *Ekonomski Anali*, *59*(200), 131–162. https://doi.org/10.2298/eka1400131p

Permana, A., Aima, M. H., Ariyanto, E., Nurmahdi, A., Sutawidjaya, A. H., & Endri, E. (2021). The effect of compensation and career development on lecturer job satisfaction. *Accounting*, *7*(6), 1287–1292. https://doi.org/10.5267/j.ac.2021.4.011

Peters, T. J., & Waterman, R. H. (1982). *In search of excellence: Lessons from America's best-run companies*. London Profile Books.

Podsakoff, P. M., MacKenzie, S. B., & Bommer, W. H. (1996). Transformational leader behaviors and substitutes for leadership as determinants of employee satisfaction, commitment, trust, and organizational citizenship behaviors. *Journal of Management*, *22*(2), 259–298. https://doi.org/10.1177/014920639602200204

Polit, D. F., & Beck, C. T. (2010). Generalization in quantitative and qualitative research: Myths and strategies. *International Journal of Nursing Studies*, *47*(11), 1451–1458. https://doi.org/10.1016/j.ijnurstu.2010.06.004

Polkinghorne, D. E. (2005). Language and meaning: Data collection in qualitative research. *Journal of Counseling Psychology*, *52*(2), 137–145. https://doi.org/10.1037/0022-0167.52.2.137

Pontinha Leite, E. C. (2018). *The relationship between leadership, orientation to happiness and work motivation [Dissertation]*.

Pool, S. W. (2000). The learning organization: Motivating employees by integrating TQM philosophy in a supportive organizational culture. *Leadership & Organization Development Journal*, *21*(8), 373–378. https://doi.org/10.1108/01437730010379276

Pradhan, S., Jena, L. K., & Bhattacharyya, P. (2018). Transformational leadership and contextual performance. *International Journal of Productivity and Performance Management*, *67*(2), 445–462. https://doi.org/10.1108/ijppm-08-2016-0186

Pramudjono, P. (2015). The influences of organizational culture, moral hierarchy level, and motivation towards the teacher's commitment. *American Journal of Educational Research*, *3*(1), 20–24. https://doi.org/10.12691/education-3-1-5

Price, T. L. (2003). The ethics of authentic transformational leadership. *The Leadership Quarterly*, *14*(1), 67–81. https://doi.org/10.1016/s1048-9843(02)00187-x

Pupavac, D. (2015). The ghost of herzberg motivational theory: Motivators and demotivators. *International Journal Vallis Aurea*, *1*(1), 15–25. https://doi.org/10.2507/ijva.1.1.2.2

Purvanova, R. K., Bono, J. E., & Dzieweczynski, J. (2006). Transformational leadership, job characteristics, and organizational citizenship performance. *Human Performance*, *19*(1), 1–22. https://doi.org/10.1207/s15327043hup1901_1

Putra, G. N. S., & Dewi, I. G. A. M. (2019). Effect of transformational leadership and organizational culture on employee performance mediated by job motivation. *International Research Journal of Management, IT and Social Sciences*, *6*(6), 118–127. https://doi.org/10.21744/irjmis.v6n6.778

Rabie, N., Karimi, F., & Naimi Sadigh, A. (2016). The effect of transformational leadership style and organizational culture on the formation of organizational cynicism in the Agricultural

Bank of Tehran. *Management Science Letters*, *6*, 443–454. https://doi.org/10.5267/j.msl.2016.4.001

Radakovich, P. (2016). *The relationship between organizational culture, intrinsic motivation, and employee performance: A systematic review and meta-analysis* [Thesis].

Rahman, Z., & Kholidi Hadi, H. (2019). Does organizational culture matters in organizational change? Transformational leadership and cynicism about organizational change. *KnE Social Sciences*, *3*(11), 353. https://doi.org/10.18502/kss.v3i11.4019

Rayner, C., & Cooper, C. (1997). Workplace bullying: Myth or reality – Can we afford to ignore it? *Leadership and Organization Development Journal*, *18*(4), 211–214.

Rehman, R. R., & Waheed, A. (2012). Transformational leadership style as predictor of a decision making styles: Moderating role of emotional intelligence. *Pakistan Journal of Commerce and Social Sciences*, *6*(2), 257–268.

Rezaei, M., Salehi, S., Shafiei, M., & Sabet, S. (2012). Servant leadership and organizational trust: The mediating effect of the leader trust and organizational communication. *Emerging Markets Journal*, *2*, 69–78.

Rijal, S. (2016). The influence of transformational leadership and organizational culture on learning organization: A comparative analysis of the IT sector. *Journal of Administrative and Business Studies*, *2*(3). https://doi.org/10.20474/jabs-2.3.3

Riyanto, S., Herlissha, N., & Endri, E. (2021). Effect of work motivation and job satisfaction on employee performance: Mediating role of employee engagement. *Problems and Perspectives in Management*, *19*(3), 162–174. https://doi.org/http://dx.doi.org/10.21511/ppm.19(3).2021.14

Rizki, M., Dhyan Parashakti, R., & Saragih, L. (2019). The effect of transformational leadership and organizational culture towards employees' innovative behaviour and performance. *International Journal of Economics and Business Administration*, *VII*(1), 227–239. https://doi.org/10.35808/ijeba/208

Roberts, L. M. (2005). Changing Faces: Professional Image Construction In Diverse Organizational Settings. *Academy of Management Review*, *30*(4), 685–711. https://doi.org/10.5465/amr.2005.18378873

Rockart, J. F., & Delong, D. W. (1988). *Executive support systems: The emergence of top management computer use*. Dow Jones-Irwin.

Roller, M. R., & Lavrakas, P. J. (2015). *Applied qualitative research design: A total quality framework approach*. The Guilford Press.

Rollins, T., & Roberts, D. (1998). *Work culture, organizational performance, and business success: Measurement and management*. Quorum Books.

Rosenbaum, B. (1991). Leading today's technical professional. *Training and Development*, *45*(0), 55–66.

Rothenberger, K. E. (2016). *A quantitative study of perceptions about leadership competencies of IT project managers* [Doctoral Dissertation].

Rubin, H. J., & Rubin, I. S. (2012). *Qualitative interviewing: The art of hearing data* (3rd ed.). Sage.

Ruiz-Palomino, P., & Martínez-Cañas, R. (2013). Ethical culture, ethical intent, and organizational citizenship behavior: The moderating and mediating role of person–organization fit. *Journal of Business Ethics*, *120*(1), 95–108. https://doi.org/10.1007/s10551-013-1650-1

Saldaña, J. (2015). *Thinking qualitatively: Methods of mind*. Sage.

Saldaña, J., & Omasta, M. (2018). *Qualitative research: Analyzing life*. Sage Publishing.

Schein, E. (1984). Coming to a new awareness of organizational culture. *Sloan Management Review*, *25*(2).

Schein, E. H. (1983). *Organizational culture: A dynamic model*. Sloan School of Management.

Schein, E. H. (2004). *Organizational culture and leadership* (3rd ed.). Jossey-Bass.

Schmid, E. A., Pircher Verdorfer, A., & Peus, C. V. (2018). Different shades—different effects? Consequences of different types of destructive leadership. *Frontiers in Psychology*, *9*. https://doi.org/10.3389/fpsyg.2018.01289

Schmidt, A. A. (2008). *Development and validation of the toxic leadership scale* [Doctoral dissertation].

Schultz, M., & Hatch, M. J. (1996). Living with multiple paradigms the case of paradigm interplay in organizational culture studies. *Academy of Management Review*, *21*(2), 529–557. https://doi.org/10.5465/amr.1996.9605060221

Settles, I. H., Buchanan, N. T., & Dotson, K. (2019). Scrutinized but not recognized: (In)visibility and hypervisibility experiences of faculty of color. *Journal of Vocational Behavior*, *113*, 62–74. https://doi.org/10.1016/j.jvb.2018.06.003

Seyal, A. H. (2015). Examining the role of transformational leadership in technology adoption: Evidence from Bruneian technical & vocational establishments (TVE). *Journal of Education and Practice*, *6*(8), 32–43.

Shafie, S. B., Siti-Nabiha, A. K., & Tan, C. L. (2014). Organizational culture, transformational leadership and product innovation: A conceptual review. *International Journal of Organizational Innovation*, 30–44.

Shafritz, J. M., Ott, S., & Jang, Y. S. (2016). *Classics of organization theory*. Cengage Learning.

Sicora, R. T. (2015). *Personality and trust: A qualitative study on the personality styles/traits of leaders and employees and the impact on culture of trust within organizations* [Dissertation].

Simoneaux, S., & Stroud, C. (2014). A strong corporate culture is key to success. *Journal of Pension Benefits*, *22*(1), 51–53.

Singh, N., Sengupta, S., & Dev, S. (2019). Toxic leadership: The most menacing form of leadership. In M. Fors Brandebo & A. Alvinius (Eds.), *Dark Sides of Organizational Behaviour and Leadership*. Intechopen.

Siyal, S., Xin, C., Umrani, W. A., Fatima, S., & Pal, D. (2021). How do leaders influence innovation and creativity in employees? The mediating role of intrinsic motivation. *Administration & Society*, *53*(9), 009539972199742. https://doi.org/10.1177/0095399721997427

Slocum-Gori, S., Hemsworth, D., Chan, W. W., Carson, A., & Kazanjian, A. (2011). Understanding compassion satisfaction, compassion fatigue and burnout: A survey of the hospice palliative care workforce. *Palliative Medicine*, *27*(2), 172–178. https://doi.org/10.1177/0269216311431311

Smith, H. A., & McKeen, J. D. (2005). Developments in practice XVIII - Customer knowledge management: Adding value for our customers. *Communications of the Association for Information Systems*, *16*. https://doi.org/10.17705/1cais.01636

Soni, K., Chawla, R., & Sengar, R. (2017). Relationship between job satisfaction and employee experience. *Journal of General Management Research*, *4*(2), 41–48.

Sosik, J. J., Avolio, B. J., & Kahai, S. S. (1998). Inspiring group creativity. *Small Group Research*, *29*(1), 3–31. https://doi.org/10.1177/1046496498291001

Sow, M., Murphy, J., & Osuoha, R. (2017). The relationship between leadership style, organizational culture, and job satisfaction in the U.S. healthcare industry. *Management and Economics Research Journal*, *03*, 1–10. https://doi.org/10.18639/merj.2017.03.403737

Spies, M. (2006). Distance between home and workplace as a factor for job satisfaction in the North-West Russian oil industry. *Fennia*, *184*(2), 133–149.

Steingrímsdóttir, H. (2012). *The relationship between internal communication and job satisfaction. A case study* [Thesis]. https://dergipark.org.tr/en/download/article-file/367064

Sumner, M., Bock, D., & Giamartino, G. (2006). Exploring the linkage between the characteristics of IT project leaders and project success. *Information Systems Management*, *23*(4), 43–49. https://doi.org/10.1201/1078.10580530/46352.23.4.20060901/95112.6

Sunarsi, D., Paramarta, V., Munawaroh, Rozi, A., Bagaskoro, Nugroho, J., & Jamalus. (2021). Effect of transformational, transactional leadership and job satisfaction: Evidence from information technology industries. *IT in Industry*, *9*(1).

Suprapti, Asbari, M., Cahyono, Y., & Mufid, A. (2020). Leadership style, organizational culture and innovative behavior on public health center performance during pandemic Covid-19. *Journal of Industrial Engineering & Management Research*, *1*(2). https://doi.org/10.7777/jiemar.v1i2

Suri, H. (2011). Purposeful sampling in qualitative research synthesis. *Qualitative Research Journal*, *11*(2), 63–75. https://doi.org/10.3316/qrj1102063

Sürücü, L., & Yeşilada, T. (2017). The impact of leadership styles on organizational culture. *International Journal of Business Management Invention*, *6*(8), 31–39.

Tanuwijaya, J., & Jakaria, J. (2022). The transformational and toxic leadership effect on employee retention. *Jurnal Manajemen Dan Pemasaran Jasa*, *15*(1), 123–134. https://doi.org/10.25105/jmpj.v15i1.13348

Taormina, R. J. (2008). Interrelating leadership behaviors, organizational socialization, and organizational culture. *Leadership & Organization Development Journal*, *29*(1), 85–102. https://doi.org/10.1108/01437730810845315

Taylor, C. M., Cornelius, C. J., & Colvin, K. (2014). Visionary leadership and its relationship to organizational effectiveness. *Leadership & Organization Development Journal*, *35*(6), 566–583. https://doi.org/10.1108/lodj-10-2012-0130

Temple, J. (2013). *A quantitative study of factors contributing to perceived job satisfaction of information technology professionals working in California community colleges* [Dissertation]. https://links.franklin.edu/login?url=https://www.proquest.com/dissertations-theses/quantitative-study-factors-contributing-perceived/docview/1437649330/se-2

Tepper, B. J. (2000). Abusive supervision. *Academy of Management Journal*, *43*(2), 178–190. https://doi.org/10.5465/1556375

Tepper, B. J., Simon, L., & Park, H. M. (2017). Abusive supervision. *Annual Review of Organizational Psychology and Organizational Behavior*, *4*, 123–152. https://doi.org/10.5465/1556375

Thite, M. (1999). Leadership styles in information technology projects. *International Journal of Project Management*, *18*. https://doi.org/10.1016/S0263-7863(99)00021-6

Thomas, S. (2015). *Exploring strategies for retaining information technology professionals: A case study* [Dissertation].

Thoroughgood, C. N., Tate, B. W., Sawyer, K. B., & Jacobs, R. (2012). Bad to the bone: Empirically defining and measuring destructive leader behavior. *Journal of Leadership & Organizational Studies*, *19*(2), 230–255. https://doi.org/10.1177/1548051811436327

Tichy, N., & Ulrich, D. (2008). Transformational leadership. *Managing Organizational Behavior*, *Spring*, 1–5.

Tnay, E., Othman, A. E. A., Siong, H. C., & Lim, S. L. O. (2013). The influences of job satisfaction and organizational commitment on turnover intention. *Procedia - Social and Behavioral Sciences*, *97*, 201–208. https://doi.org/10.1016/j.sbspro.2013.10.223

Tobing, D. S. K., & Syaiful, M. (2018). The influence of transformational leadership and organizational culture on work motivation and employee performance at the state property service office and auction in East Java Province. *International Journal of Business and Commerce*, *5*(6), 37–48.

Top, M., Akdere, M., & Tarcan, M. (2015). Examining transformational leadership, job satisfaction, organizational commitment and organizational trust in Turkish hospitals: Public servants versus private sector employees. *The International Journal of Human Resource Management*, *26*(9), 1259–1282. https://doi.org/10.1080/09585192.2014.939987

Törnblom, O. (2018). Managing complexity in organizations: Analyzing and discussing a managerial perspective on the nature of organizational leadership. *Behavioral Development*, *23*(1), 51–62. https://doi.org/10.1037/bdb0000068

Torpman, J. (2004). The differentiating function of modern forms of leadership. *Management Decision*, *42*(7), 892–906. https://doi.org/10.1108/00251740410550952

Torres, R. T., & Preskill, H. (2001). Evaluation and organizational learning: Past, present, and future. *American Journal of Evaluation*, *22*(3), 387–395. https://doi.org/10.1177/109821400102200316

Totterdill, P., & Exton, R. (2017). Creating the bottom-up organisation from the top: Leaders as enablers of workplace innovation. In *Workplace Innovation: Theory, Research and Practice* (pp. 189–207). Springer.

Tourish, D. (2013). *The dark side of transformational leadership : A critical perspective*. Routledge.

Tran, Q. H. N. (2020). Organisational culture, leadership behaviour and job satisfaction in the Vietnam context. *International Journal of Organizational Analysis*, *29*(1), 136–154. https://doi.org/10.1108/ijoa-10-2019-1919

Tran, S. K. (2017). Google: A reflection of culture, leader, and management. *International Journal of Corporate Social Responsibility*, *2*(1). https://doi.org/10.1186/s40991-017-0021-0

Trice, H. M., & Beyer, J. M. (1993). *The cultures of work organizations*. Prentice Hall.

Trice, H. M., Belasco, J., & Alutto, J. A. (1969). The role of ceremonials in organizational behavior. *ILR Review*, *23*(1), 40–51. https://doi.org/10.1177/001979396902300104

Tsai, Y. (2011). Relationship between Organizational Culture, Leadership Behavior and Job Satisfaction. *BMC Health Services Research*, *11*(1).

Tse, H. M., & Lam, W. (2008). Transformational leadership and turnover: The roles of LMX and organizational commitment. *Academy of Management Proceedings*, *2008*(1), 1–6. https://doi.org/10.5465/ambpp.2008.33723870

Unkelbach, C., Fiedler, K., Bayer, M., Stegmüller, M., & Danner, D. (2008). Why positive information is processed faster: The density hypothesis. *Journal of Personality and Social Psychology*, *95*(1), 36–49. https://doi.org/10.1037/0022-3514.95.1.36

US Bureau of Labor Statistics. (2022). *Computer and information technology occupations: Occupational outlook handbook: U.S. bureau of labor statistics*. Www.bls.gov. https://www.bls.gov/ooh/computer-and-information-technology/home.htm#:~:text=Employment%20in%20computer%20and%20information

Uysal, H. T. (2019). The mediation role of toxic leadership in the effect of job stress on job satisfaction. *International Journal of Business*, *24*(1), 55–73.

Valentine, S., Godkin, L., Fleischman, G. M., & Kidwell, R. (2010). Corporate ethical values, group creativity, job satisfaction and turnover intention: The impact of work context on work response. *Journal of Business Ethics*, *98*(3), 353–372. https://doi.org/10.1007/s10551-010-0554-6

Van Dyk, J., & Coetzee, M. (2012). Retention factors in relation to organisational commitment in medical and information technology services. *SA Journal of Human Resource Management*, *13*(1). https://doi.org/10.4102/sajhrm.v10i2.433

Veiseh, S., Mohammadi, E., Pirzadian, M., & Sharafi, V. (2014). The relation between transformational leadership and organizational culture (case study: Medical school of ilam). *Journal of Business Studies Quarterly*, *5*(3), 114–124.

Virgiawan, A. R., Riyanto, S., & Endri, E. (2021). Organizational culture as a mediator motivation and transformational leadership on employee performance. *Academic Journal of Interdisciplinary Studies*, *10*(3), 67. https://doi.org/10.36941/ajis-2021-0065

Volini, A. (2020). A perspective on technology education for law: A perspective on technology education for law students. *Santa Clara High Technology Law Journal Santa Clara High Technology Law Journal*, *36*(2).

Wakabi, B. M. (2016). Leadership style and staff retention in organisations. *International Journal of Science and Research (IJSR)*, *5*(1), 412–416. https://doi.org/10.21275/v5i1.nov152642

Waldman, D. A., & Yammarino, F. J. (1999). CEO charismatic leadership: Levels-of-management and levels-of-analysis effects. *The Academy of Management Review*, *24*(2), 266. https://doi.org/10.2307/259082

Waldman, D. A., Bass, B. M., & Einstein, W. O. (1987). Leadership and outcomes of performance appraisal processes. *Journal of Occupational Psychology*, *60*(3), 177–186. https://doi.org/10.1111/j.2044-8325.1987.tb00251.x

Walsham, G. (1995). Interpretive case studies in IS research: nature and method. *European Journal of Information Systems*, *4*(2), 74–81. https://doi.org/10.1057/ejis.1995.9

Walumbwa, F. O., Orwa, B., Wang, P., & Lawler, J. J. (2005). Transformational leadership, organizational commitment, and job satisfaction: A comparative study of Kenyan and

U.S. financial firms. *Human Resource Development Quarterly*, *16*(2), 235–256. https://doi.org/10.1002/hrdq.1135

Warrick, D. D. (2017). What leaders need to know about organizational culture. *Business Horizons*, *60*(3), 395–404. https://doi.org/10.1016/j.bushor.2017.01.011

Weber, M. (1947). *The theory of social and economic organization*. Free Press.

Webster, V. J. (2015). *The dark side of leadership and its impact on followers* [Dissertation].

Weick, K. E., & Mintzberg, H. (1974). The nature of managerial work. *Administrative Science Quarterly*, *19*(1), 111. https://doi.org/10.2307/2391793

Weiss, D., Dawis, R., & England, G. (1967). Manual for the Minnesota satisfaction questionnaire. *Minnesota Studies in Vocational Rehabilitation*.

Welsh, E. (2002). Dealing with data: Using NVivo in the qualitative data analysis process. *Forum: Qualitative Social Research*, *3*(2). https://doi.org/https://doi.org/10.17169/fqs-3.2.865

Welty Peachey, J., J. Burton, L., & E. Wells, J. (2014). Examining the influence of transformational leadership, organizational commitment, job embeddedness, and job search behaviors on turnover intentions in intercollegiate athletics. *Leadership & Organization Development Journal*, *35*(8), 740–755. https://doi.org/10.1108/lodj-10-2012-0128

West Monroe Partners. (2018). *Closing the technology leadership gap*.

Winn, G. L., & Dykes, A. C. (2019). Identifying toxic leadership and building worker resilience. *Professional Safety*, *64*(3), 38–45.

Wu, F., Yeniyurt, S., Kim, D., & Cavusgil, S. T. (2006). The impact of information technology on supply chain capabilities and firm performance: A resource-based view. *Industrial*

Marketing Management, *35*(4), 493–504. https://doi.org/10.1016/j.indmarman.2005.05.003

Xenikou, A. (2017). Transformational leadership, transactional contingent reward, and organizational identification: The mediating effect of perceived innovation and goal culture orientations. *Frontiers in Psychology*, *8*(1). frontiersin. https://doi.org/10.3389/fpsyg.2017.01754

Xenikou, A., & Simosi, M. (2006). Organizational culture and transformational leadership as predictors of business unit performance. *Journal of Managerial Psychology*, *21*(6), 566–579. https://doi.org/10.1108/02683940610684409

Xiaoming, C., & Junchen, H. (2012). A literature review on organization culture and corporate performance. *International Journal of Business Administration*, *3*(2). https://doi.org/10.5430/ijba.v3n2p28

Xu, E., Huang, X., Lam, C. K., & Miao, Q. (2011). Abusive supervision and work behaviors: The mediating role of LMX. *Journal of Organizational Behavior*, *33*(4), 531–543. https://doi.org/10.1002/job.768

Yahaya, R., & Ebrahim, F. (2016). Leadership styles and organizational commitment: Literature review. *Journal of Management Development*, *35*(2), 190–216. https://doi.org/10.1108/jmd-01-2015-0004

Yammarino, F. (2013). Leadership: Past, present, and future. *Journal of Leadership & Organizational Studies*, *20*(2), 149–155.

Yeniyurt, S., Wu, F., Kim, D., & Cavusgil, S. T. (2019). Information technology resources, innovativeness, and supply chain capabilities as drivers of business performance: A

retrospective and future research directions. *Industrial Marketing Management*, *79*, 46–52. https://doi.org/10.1016/j.indmarman.2019.03.008

Yucel, I., McMillan, A., & Richard, O. C. (2014). Does CEO transformational leadership influence top executive normative commitment? *Journal of Business Research*, *67*(6), 1170–1177. https://doi.org/10.1016/j.jbusres.2013.05.005

Yukl, G. (2008). How leaders influence organizational effectiveness. *The Leadership Quarterly*, *19*(6), 708–722. https://doi.org/10.1016/j.leaqua.2008.09.008

Yukl, G. (2012). Effective leadership behavior: What we know and what questions need more attention. *Academy of Management Perspectives*, *26*(4), 66–85. https://doi.org/10.5465/amp.2012.0088

Yukl, G. A. (1989). *Leadership in organizations* (2nd ed.). Pearson Education, Inc.

Yukl, G. A., & Becker, W. S. (2006). Effective empowerment in organizations. *Organization Management Journal*, *3*(3), 210–231. https://doi.org/10.1057/omj.2006.20

Yukl, G., & Mahsud, R. (2010). Why flexible and adaptive leadership is essential. *Consulting Psychology Journal: Practice and Research*, *62*(2), 81–93. https://doi.org/10.1037/a0019835

Yu, P.L., Fang, S.-C., & Wang, Y.L. (2016). Improving IT professionals job skills development: The use of management styles and individual cultural value orientation. *Asia Pacific Management Review*, *21*(2), 63–73. https://doi.org/10.1016/j.apmrv.2015.07.002

Yurchisin, J., & Park, J. (2010). Effects of retail store image attractiveness and self-evaluated job performance on employee retention. *Journal of Business and Psychology*, *25*(3), 441–450. https://doi.org/10.1007/s10869-010-9161-x

Zaccaro, S. J. (1996). The conceptual and technical foundations of "smart" groups. *Contemporary Psychology: A Journal of Reviews*, *41*(11), 1102–1103. https://doi.org/10.1037/003198

Zafar, N., Ishaq, S., Shoukat, S., & Rizwan, M. (2014). Determinants of Employee Motivation and its impact on Knowledge Transfer and Job Satisfaction. *International Journal of Human Resource Studies*, *4*(3). https://doi.org/10.5296/ijhrs

Zhang, M., & Tansuhaj, P. S. (2007). Organizational culture, information technology capability, and performance: The case of born global firms. *Multinational Business Review*, *15*(3), 43–78. https://doi.org/10.1108/1525383x200700012

Zohar, D. (2002). The effects of leadership dimensions, safety climate, and assigned priorities on minor injuries in work groups. *Journal of Organizational Behavior*, *23*(1), 75–92. https://doi.org/10.1002/job.130

Zwingmann, I., Wegge, J., Wolf, S., Rudolf, M., Schmidt, M., & Richter, P. (2014). Is transformational leadership healthy for employees? A multilevel analysis in 16 nations. *German Journal of Human Resource Management*, *28*(1-2), 24–51. https://doi.org/10.1177/239700221402800103

Appendix A

Sample Email to Study Population

Hello-

I am a graduate student at Franklin University working on a Doctor of Business Administration degree. I am conducting interviews as part of a doctoral research study to increase understanding of leadership styles' influence on organizational culture and job satisfaction for I.T. professionals in the U.S.

I am inviting you to participate in my study to learn about the experiences of technology professionals concerning leadership traits, job satisfaction, and organizational culture. As a technology professional, your thoughts will be valuable to understanding the impacts of leadership styles and behaviors related to technology practitioners and leaders.

The interview will take around 60 minutes via Zoom and is very informal. Interviews will be recorded to capture your thoughts accurately and so that I can focus on our conversation.

Your responses will be kept entirely confidential. Each interview will be assigned a number code to help ensure that personal identifiers are not revealed during the analysis and write-up of findings.

There is no compensation for participating in this study.

If you are willing to participate, please reply to this message and suggest a day and time that works best for you, along with a personal email address. I will then send you a consent form to review and electronically sign.

If you have any questions or concerns, please contact me at bratt01@email.franklin.edu.

Thank you for your time and consideration!

Bridget Bratt

Bridget Bratt

Appendix B

Interview Protocol and Questions

Project: Transformational Leadership Traits and Job Satisfaction among US Technology Professional: An Exploratory Qualitative Examination

Date:

Time:

Location:

Interviewer:

Interviewee:

Is the release form signed?

Note to Interviewee:

Thank you for your participation. I believe your input will be valuable to this research in further understanding any relationship between leadership styles, organizational culture, and technology professionals.

Confidentiality of responses is guaranteed. Participation in this study is entirely voluntary, and you have the right to opt-out at any time by emailing bratt01@email.franklin.edu

Approximate length of interview: 60 minutes, 19 questions

Purpose of Research:

> *What transformational leadership traits or behaviors influence organizational culture and job satisfaction for information technology professionals?*

1. What engages you about your work?
2. What causes you to disengage at work?
3. What are some of the behaviors you want to see in your leaders? What are some of the behaviors you not want = in your leaders?

4. How does your leadership inspire you to be innovative and creative?
5. Can you describe the person you look to for guidance in your organization and why?
6. Can you talk to me about the communication level with your direct supervisor?
7. Can you describe the communication level with different levels of leadership within your organization?
8. Do you trust your leadership?
9. What qualities are essential for a leadership role?
10. Tell me about a particular leader who impacted you by their actions – what did they do? Why did this leader's impact stay with you?
11. How does your current leadership provide feedback?
12. How does your leadership act as a role model? What specific things do they do?
13. What level of autonomy do you have at your job?
14. How important is autonomy in your profession?
15. How does your direct leadership show compassion for your well-being?
16. How does your organization's leadership fosters mentoring, coaching, and collaboration?
17. If you were the CEO of your company, what are some things you would change about the culture?
18. Would you re-apply for the same position again, knowing what you know today about the company?
19. How does your leadership help you to develop your strengths?

Appendix C

Consent Form

My name is Bridget Bratt, and you are invited to participate in a research study. I am a graduate student in the Doctor of Business Administration program at Franklin University in Columbus, Ohio. As part of the requirements for earning my doctorate, I am doing a research study

Why is this study being done?

This study examines transformational leadership traits and their influence on organizational culture and job satisfaction among technology professionals. This study could be used to develop or create a more "people-centric" leadership training program for technical employees. I am inviting you to participate in my project because you are a current technology professional, and you were selected or recommended based on your current role and experience.

What are you being asked to do?

If you choose to participate in this study, I will schedule an interview via Zoom per your schedule and availability.

Taking part in this study is your choice.

Your participation in this project is entirely voluntary. You may stop participating at any time. If you stop being in the study, there will be no penalty or loss of benefits you would usually have.

What will happen if you decide to take part in this study?

The interview will consist of approximately 20 questions. It will take about 60 minutes.

Only you and I will be present during the interview. You will be one of approximately 25 people interviewed for this study. If you choose to participate, with your permission, I will record the interview so that we can have a comfortable conversation and I can later transcribe the interview for data analysis.

What are the risks and benefits of taking part in this study?

There are no foreseeable risks to you for participating in this research project, as names of companies and coworkers/leadership will not be collected. If you become uncomfortable during

the interview, you can skip questions or take a break. You can also stop the interview or withdraw from the study altogether.

There will be no direct benefit to you for participating in this interview. However, the results of this project may assist in building improved leadership and soft skills training.

Privacy and Confidentiality:

I will keep all study data on an external encrypted hard drive in my private home office in a locked drawer. Only my Franklin University dissertation chair and I will have access to the information. Other agencies that have legal permission have the right to review research records. The Franklin University IRB has the right to review research records for this study.

After writing a copy of the interviews, I will erase or destroy the recordings. When I report the results of my research project, I will not use your name. Furthermore, I will not use any other personally identifying information that can identify you. Instead, I will use alpha-numeric identifiers and report my findings to protect your privacy and confidentiality to the extent allowed by law.

Future Research Studies:

Identifiers will be removed from your identifiable private information. After removing identifiers, the data may be used for future research studies or distributed to another investigator for future research studies, and we will not seek further approval from you for these studies.

Questions:

If you have any questions about this study, please email me at bratt01@email.franklin.edu. You may also contact my dissertation chair, Dr. Tracy Greene, at tracy.greene@franklin.edu. Finally, if you have any questions regarding your rights as a research participant, please contact the Franklin University IRB Office at 614-947-6037 or irb@franklin.edu.

If you agree to participate in this project, please digitally sign and date the following signature page and return it to: bratt01@email.franklin.edu.

Keep a copy of the informed consent for your records and reference.

Signature(s) for Consent:

I agree to join the research project entitled: **Transformational Leadership Traits and Organizational Culture Drivers Among U.S. and Information Technology Professionals: An Exploratory Qualitative Examination**

Please initial next to either "Yes" or "No" to the following:

_____ Yes _____ No I consent to be audio recorded for the interview portion of this research.

_____ Yes _____ No I consent to being video recorded for the interview portion of this research.

Name of Participant (Print): _____

Participant's Signature: _____

Signature of the Person Obtaining Consent: _____

Date: _____