

Problem of Toxic Leadership Instead of Modern Leadership at New Age in the 21st Century

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Abstract

Leadership has always been an indispensable imperative instrument to the leaders in steering the development of an organization, a country or the globe as a whole in a relative dealing with associated contemporary factors in every era everywhere in every civilization. Thus, the significance and necessity of leadership are becoming increasingly recognized in the contemporary period. In today's fast-changing world, the successful utilization of technology and contemporary lifestyles has become an essential component of leadership. Technology has a tremendous impact on all facets of human existence, and it is revolutionizing how contemporary leaders connect, manage everyday affairs, and conduct their businesses. Modern or contemporary leaders can make educated judgments, generate innovation, and remain ahead of the competition by leveraging technological improvements, which also boost efficiency and productivity. The emphasis is on how organizations, agencies, businesses, industries, or nations can get effective leadership style to achieve their mission and vision. There are many challenges and gaps of true cognizant and contemporary leaders, whether in politics, religion, organization, business, education, or institutions, everywhere in era of technological advancement. Famous or great leaders globally recognize the significant role of technology that plays in personnel management. It may facilitate team development and oversee work across all channels and locations globally. The normal workplace is no longer as conventional as it once was due to technological advancements and globalization. Once more, workplace toxicity is a prevalent concern that can impede the performance of employees and the overall profitability of an organization. Modern leaders must embrace a more contemporary management approach in order to achieve success. This involves adopting novel tactics and concepts while simultaneously remaining adaptable and receptive to change. Nonetheless, a counterargument exists asserting that traditional leadership remains relevant and that both techniques can be integrated concurrently. When an organization faces challenges in creativity and transformation, modern leader-

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ship approaches tend to be more appropriate, particularly in a global setting. The author of this analytical research has taken an effort to deliver a thorough examination of toxic leadership and its associated problems and challenges, alongside contemporary leadership approaches, in a period where smart and advanced technologies are crucial in the 21st century.

Keywords

Modern Leadership, Toxic Environment, 4IR, Digital and Smart Technology, IoT, AI

1. Introduction

Leadership is the capacity to express a vision, adopt the principles of that vision, and cultivate an atmosphere in which all individuals can achieve the organization's objectives and their requirements. Typically, leaders are individuals who hold positions of authority, influence, power, and responsibility at the highest echelons of an organization. Nevertheless, this is entirely inaccurate. They are the individuals who motivate and inspire others with their behavior, style, and abilities. Modern or contemporary leaders are surrounded by individuals who share their passion, drive, and thought process. They have a genuine following, team members, and lovers; nonetheless, they are not motivated by fame or popularity. Their vision and objectives are evident, and they were implemented without the necessity of obtaining special privileges, rights, or positions. Modern leadership is not contingent upon one's status or position. Typically, they remain as an executive senior to whom the subordinates are compelled to adhere, even if their views and vision are in stark opposition. Modern leaders do not require any particular tie or relationship to a position or social status in order to influence and persuade individuals to believe in them (Hossain, 2015a). Successful and contemporary leadership does not require a high position, titles, chief, manager, or senior executive. The world of brain workers is currently being transformed by Internet of Thing (IoT), Artificial Intelligence (AI), Machine Learning (ML), Deep Learning (DL), big data, blockchain, cloud computing, platform economy offers, big data, and judgments based on algorithms. Even auditors, lawyers, engineers, medics, data scientists, and computer scientists are impacted by the complex situation. In reality, leadership was predicated on exceptional proficiency a few decades ago. This emphasis is gradually waning. The management of relationships will be the primary responsibility of future leaders. In order to facilitate collaboration and relationships within teams and departments, future leaders must establish a constructive, creative tension. Thus, a modern leader who possesses the necessary capacity to communicate, persuade, relate, motivate, and influence is the most suitable and precise candidate to effectively manage human resources in a manner that benefits both the firm and its people (Hossain, 2015b). Contemporary leadership works when people use their influence, concept, vision, and effect. If we

compare millennial leaders to Gen Z, it may place even greater emphasis on protecting their mental health and achieving a healthy work-life balance.

The concept of organizational toxicity (OT) refers to a scenario that negatively affects employees' morale and motivation, leading to suffering and problems. This circumstance also diminishes their interest in their jobs (Frost, 2003). OT is a sort of workplace negativity that leads to a decline in general employees' happiness and performance, a breakdown of teamwork, and a rise in turnover rates. From this perspective, it appears that OT is an organizational issue that poses a substantial threat to the organization's future and has a severe influence on personnel (Gunderman & Sechrist, 2019). Organizational toxicity is a key organizational challenge that has a severe impact on the effectiveness of both people and companies. The physical and psychological well-being of employees is negatively impacted by the poor working circumstances that are emphasized by organizational toxicity (Flippo, 1984). This, in turn, creates an organizational atmosphere that results in burnout syndrome and depression. As a result, organizational toxicity can hurt employees and jeopardize the future of organizations (Tekin et al., 2023). In a toxic work environment, employees may be apprehensive about expressing their opinions, worries, or thoughts due to fears of rejection or reprimand. Unethical conduct, including racism, deception, or the making of false promises, may also result from a hostile work environment (Hetler & Heaton, 2025). Organizational toxicity affects all levels, from executive boards to followers, and leadership is relationship-driven (Hetrick, 2024). The entire organizational system has been diseased, and chopping off the rotten head will not be effective. The initial step in enhancing a culture is to identify the factors that contribute to its toxic nature. If leaders endeavor to enhance every component of business culture that some people find bothersome, they will waste their time and energy. Instead, they should focus on resolving the fundamental issues that cause the most distress for employees, which in turn leads to disengagement, negative perceptions of their employer, and resignation (Sull et al., 2022).

A leader must ensure their approach to satisfy three essential criteria before starting any technology-based project: technical feasibility, financial viability, and legal acceptability. When assessing technical feasibility, it is important to examine how well the proposed technology aligns with the organization's infrastructure and capabilities. The successful execution of the plan will be determined by conducting a comprehensive technical review. The subsequent step is to evaluate its financial viability (Goldman, 2009). The expenses of technology implementation must be taken into account by leaders. They should assess the Return on Investment (ROI) to determine whether the benefits outweigh the associated costs. The analysis of projected income creation, maintenance expenses, and upfront costs is essential for these procedures. Consequently, it is imperative to ascertain the legality of the reformation in question. In order to ensure compliance, leaders must navigate legal and regulatory frameworks (DuBrin, 2000). They need to understand intellectual property rights, data privacy laws, and other relevant standards

to prevent legal issues. The evolution of technology demonstrates the significant influence of human intelligence on society. Understanding this progression helps leaders use technology to alter their decision-making (Kootz, 1978). The wheel's invention has transformed transportation and trade, facilitating the expansion of civilizations. The promise of this straightforward yet potent technological innovation was acknowledged by the leaders of that era, who employed it to broaden their empires. The Industrial Revolution commenced with the invention of the steam engine, which revolutionized transportation and production. This technique was utilized by leaders, such as, James Watt to transform entire industries and accelerate advancement. The digital age and the emergence of computers expedited the speed of invention (Mayers, 2023).

Digitalization simplifies processes, improves communication, and expands markets, giving leaders an edge. Intelligent and modern CEOs may use AI, IoT, ML, and big data for predictive analysis, data-driven decision-making, and automation. These breakthrough technologies benefit many industries, enterprises, service sectors, and aspects of life. Tech is becoming more beneficial in many fields. Technology is causing a digital and intelligent revolution. Intelligent leaders must adapt to new technology. If not, they cannot connect and lead globally. AI and robots' ability to automate occupations, enhance decision-making, and simplify processes will alter the workplace in the coming decade. AI-powered gadgets can analyze massive data sets, identify patterns, and make precise predictions. This enables leaders to make data-driven decisions, thereby improving competitiveness, efficiency, accuracy, cost, and idea generation. AI may also automate ordinary tasks, freeing up time for subordinates and men to focus on strategic and creative work. This shift in focus boosts innovation and personnel satisfaction. AI allows customized team experiences, like learning and development programs and career routes. AI and other modern technologies can help leaders build a future-proof, sustainable, adaptable, flexible, and purpose-oriented company that thrives in the rapidly evolving military domain and future battle-space. AI lets pupils customize their education. AI technology may also boost education and teacher skills. Large financial organizations use AI to simplify investment. Aladdin, BlackRock's AI engine, helps clients make financial decisions. In 4th Industrial Revolution (4IR), technologies can lead to enhanced quality of life through improvements in healthcare, education, transportation, living, distribution, and other necessary services. The integration of 4IR technologies can stimulate economic growth and national development by fostering innovation, creating new markets, and improving overall economic efficiency (Alves et al., 2023). According to 4IR Energy Solutions, it is also opening the ways to address social inequalities by providing access to education, healthcare, and economic opportunities for all (4IR Energy Solutions, 2023).

In the 21st century, super-intelligence, hyper-intelligence, or superhuman intelligence is a hypothetical agent with intelligence much beyond that of the most gifted and bright human mind. Agents' intelligence can alternatively be called "su-

per-intelligence”. Artificial general intelligence research may enable innovative software to self-reprogram and improve. The enhanced software would be even better at self-improvement, causing recursive self-improvement. If it has an intelligence explosion, its cognition may rise exponentially and exceed humans. This circumstance was called “singularity” by science fiction author Vernor-Vinge. Since the limits of intelligence and super-intelligent computers are unknown, the technological singularity is unforeseeable and unfathomable. In hours, ML or AI can build tens of thousands of harmful substances. Thus, complex technology or super-intelligent robots may arise shortly. Leaders of the future must be ready. In the tech-driven era, good leadership requires strong beliefs. Leaders need technology, but they also need honesty, agility, and balance. Transparent communication builds trust and teamwork. To encourage ideation and feedback, leaders must be honest with their teams, stakeholders, and themselves. Adaptability and flexibility are key to success (Adair, 1983). Leaders must adapt to evolving technologies (James, 2013). It enables leaders to capitalize on emerging opportunities, adopt innovative ideas, and effectively manage challenges in a rapidly changing industry. Effective leaders achieve a harmonious equilibrium between the human and technological components. Although technological utilization is essential, it is equally critical to value interpersonal relationships, emotional intelligence, and empathy. It is undeniable that the workplace has undergone a significant transformation in recent years as a result of the proliferation of new technologies. Nevertheless, there are several instances in which traditional leadership yields superior results, such as when stability and order are essential, or during a period of crisis. The fundamental principle is that a leader must be capable of adapting to the circumstances and use the appropriate theories, tools, tactics, and approach to complete the mission.

Modern leadership involves an individual’s efforts to persuade, influence, motivate, and inspire others. It differs significantly from traditional leadership, which relies on titles, positions, or ranks. Command is restrictive and can cause conflict or objections among those who are not convinced, inspired, or affected by the vision, aims, ideas, and perspectives. A contemporary leader who effectively inspires others by clearly elucidating the advantages and drawbacks of actions, strategies, and plans in a practical, on-the-ground manner is more likely to be accepted and followed, as followers or team members can connect with and be convinced. Unlike influence, control, command, and order, modern leadership depends on communication, interaction, attention, and caring. It is clear that modern leadership is not based on rank, position, or title; rather, it is a comprehensive approach, lifestyle, attitude, and conduct. Essentially, it is less about titles, command, and control, and more about the leader’s dedication, collaboration, and relationship with team members, along with accepting their perspectives and ideas. This happens when the leader demonstrates the right traits and attitudes to influence and inspire. The professional attitude and personal growth of employees are equally vital to contemporary leaders, alongside job achievement or output. Leaders must

foster a caring and attentive connection with their staff. Therefore, modern leadership is a holistic lifestyle where individuals develop and refine their behavioral skills to motivate and inspire their team members to emulate them. While command, control, authority, and ranks/titles offer opportunities to lead, they are far removed from the qualities of a modern, effective leader. The author has aimed to provide a comprehensive examination of leadership in the 21st century, especially considering the impact of advanced technology. This paper will focus on the influence of emerging technologies, the consequences of the fourth industrial revolution, the effects of IoT, AI, ML, DL, big data, robots, and other innovations, as well as the concept of modern leadership and other contemporary leadership issues. The study will thoroughly explore the challenges of contemporary leadership, toxic leadership traits, and current leadership practices. The author has also sought to investigate how technology has evolved to transform leadership, the development and challenges of leadership globally, the core values and traits of modern leaders, and the development and practice of modern leadership in this era from a global perspective.

2. Literature and Methodology

Leadership is a complex subject area where McShane and Glinow have divided this subject into few categories like, Transform, Implicit, Contingence, Competent and Behavioural (McShane & Glinow, 2005). Organizations may focus on both transformational and transactional leadership styles and usually choose the transformational leadership to be efficient and effective. There is a contradiction within research where some believe transformational leadership is a further extension of charismatic leadership, whereas others believe both charismatic and transformational are discernible. Transformational leadership is based on behaviors and it leads the process of strategic organizations. Leaders move organizations forward out of creation of community structure of common values (Hood, 2003). Few contemporary writers have encouraged leaders to become more knowledge seekers while adapting the transactional leadership style which solves analytical problems (Jogulu & Wood, 2006). On the other hand, few writers have argued that transformational leadership appends transactional leadership through few modifications introduce better leaders (Judge & Piccolo, 2004). On the other hand, Mazdar describes transactional and transformational leadership as two different leadership theories, however an individual leader has the ability to possess traits from both theories (Madzar, 2001). According to Aaltio-Marjosola and Takala charismatic leadership are exhibiting signs of incompetence and subordination (Aaltio Marjosola & Takala, 2000). Reason to accept charismatic leadership based on distress but the leaders are highly qualified. Again, charismatic leaders are inaccurately formed and suitable to portray in common media like television, radio and newspaper (Gore, 2006). Situation based contingency leadership plays a major role within tasks and leaders. There are outside factors heavily pressure the organizations than internal in contingency leadership. 21st century leadership styles

have affected the design of the modern organizations. Intervention has severely influenced employee involvement, network structures and total quality management (Halvorson, 2014). Therefore, any adjustments for 21st century leadership patterns have to accomplish while aligning a strategy for organization development. According to Kotter (2008) good leaders always reward success and do not halt until a problem occurs. They fore-see and take precautions to tackle possible problematic areas which could occur in future (Kotter, 2008).

Scholars and researchers have attempted to compile a literature review on leadership style and organizational transformation (Ciulla, 2020). There are authoritarian, transformational, laissez-faire, servant, transactional, democratic, strategic, bureaucratic, consultative, and participative leadership have been recognized as change management accelerators in various literature reviews (Bommer et al., 2004). Leadership is essential for the successful implementation of beneficial organizational transitions, as demonstrated by subsequent research (Adams et al., 2020), (2020). Leadership is the process of leading and guiding subordinates down the intended route that the leader has established to achieve organizational objectives (Kadiyono et al., 2020). The significance of company culture and environment in shaping leadership behaviors is paramount. According to Schein, organizational culture is the collective set of values, beliefs, and assumptions that influence organizational behavior (Schein, 2010). Conversely, organizational climate pertains to employees' perspectives and attitudes on their workplace (Schneider et al., 2013). The leader-subordinate relationship is influenced by the cultural environment, which in turn influences the acceptance of specific leadership styles (Schaubroeck et al., 2012). Einarsen also underscore the significance of differentiating between ineffective leadership and harmful leadership (Einarsen et al., 2007). Ineffective leadership is defined by a lack of expertise or aptitude to achieve desired objectives, whereas harmful leadership involves purposeful activities that cause harm to others. Schneider stressed the crucial role that leaders play in the establishment of corporate culture and environment, highlighting the necessity of ethical and inclusive leadership practices (Schneider et al., 2013; Mai & Akerson, 2003).

The growing recognition by businesses worldwide that distant organizations and events have an impact on their operations is fostering fresh perspectives on leadership, as it has on many aspects of business (Peterson, 1988). A wide range of strategy possibilities for engaging in global competitiveness presents a challenge to corporate-level leaders, including chief executives and top-level management teams (Hofstede, 1980). A handful of significant distinctions distinguish traditional leadership and modern leadership. The absence of input or involvement from others in the decision-making process characterizes the authoritarian approach of traditional leaders (Goldstein, 1993). Conversely, modern leaders are inclined to adopt a more collaborative approach, which entails collaborating to accomplish shared objectives and including others in the decision-making process. Modern leadership prioritizes cooperation and teamwork, whereas conven-

tional leadership is founded on power and control. Traditional leaders may also prioritize task-oriented objectives, whereas contemporary leaders may prioritize people-oriented objectives. In general, traditional leaders employ a top-down style, which involves making decisions without the involvement of others (Crick, 1995). Conversely, contemporary leaders are more likely to use a participatory or democratic approach, which entails the involvement of others in the decision-making process. Traditional leaders may also be more autocratic, use punishing measures to enforce their will, whereas contemporary leaders are more likely to adopt motivational strategies (Yukl & Fleet, 1992). Traditional leaders may be more likely to wield official authority to influence others, whereas modern leaders may be more inclined to employ informal power. In contrast to a current leadership style, there are few unambiguous advantages to utilizing a conventional leadership paradigm. Traditional leadership practices are often more well-received and accepted by personnel as a result of their length. A traditional leadership strategy may be helpful in firms with complex hierarchies or extensive operations, since it lends itself to more stability and organization. Communication and decision-making can be facilitated by traditional leadership styles, which are more formal and have clear lines of control (Hidayat Rizvi, 2024a).

The literature employs a variety of concepts to delineate the detrimental characteristics of leadership, such as petty tyranny (Ashforth, 1994, 1997), supervisory abuse (Tepper et al., 2007), unpleasant leadership (Bligh, Kohles, Pearce, Justin, & Stovall, 2007), and poisonous leadership (Einarsen et al., 2007) bullying (Rayner & Cooper, 1997) and toxic leadership (Lipman-Blumen, 2005a). The concept of toxic leadership has been derived from the transformational leadership model, a fundamental framework for leadership (Kouzes, 1993). This paradigm, as articulated by Kusy et al. (2009) and Reed & Olsen (2010), posits that effective leaders must inspire a vision of prosperity, design strategies to achieve this objective, and cultivate a team capable of guiding the firm toward success in both its current and future environments (Blau & Boal, 1987). Harris, Kacmar, & Zivnuska (2007) emphasize that the psychological repercussions of toxic leadership can manifest in physical health issues (Harris et al., 2007), such as headaches, sleep disturbances, and cardiovascular illnesses. Absenteeism and decreased productivity are further exacerbated by these health conditions. The toxic triangle model of Padilla, Hogan, & Kaiser (2007) offers a comprehensive framework for understanding the factors that contribute to the development of toxic leadership (Padilla et al., 2007). The paradigm recognizes three critical components: permissive settings, vulnerable followers, and destructive leaders. “Social Learning Theory” as advocated by Bandura, offers a perspective on how organizations acquire and maintain toxic leadership behaviors (Bandura, 1977).

On the other hand, there are certain disadvantages of modern leadership in comparison to traditional leadership. Leaders in the present day may not possess the same amount of power or respect. Contemporary leaders may induce followers to have less motivation. Some circumstances may render contemporary lead-

ership approaches less successful. A larger focus may be placed on individual accomplishments than on team performance. Nevertheless, there are certain benefits to employing a contemporary leadership paradigm in comparison to older leadership approaches. Compared to previous leaders, contemporary leaders are often more concerned with delivering outcomes (Zangaro, 2009). This suggests that they prefer to execute methods that benefit their companies over maintaining the status quo. Contemporary leaders often value teamwork above individual achievement (Hidayat Rizvi, 2024b). This may result in a more cohesive and productive team, as well as an increase in creativity and innovation. Continuous learning is frequently a priority for contemporary leaders, both for themselves and their staff (Bligh et al., 2007). This enables them to remain informed about the most recent trends and advancements in their respective sectors, as well as to acquire new skills and expertise. Contemporary leaders generally endeavor to empower their staff rather than merely dominating them. Therefore, this may result in enhanced productivity, increased job satisfaction, and motivation. In general, contemporary leaders are receptive to change, both in their approach to tasks and in the objectives they establish for their businesses. This enables them to capitalize on fast changing settings and swiftly adjust to new conditions and possibilities. This study will evaluate the available literature on the notion of virtual teams and modern/advanced technologies and e-leadership (Lin et al., 2010). The objectives of leadership have remained consistent, as indicated by recent research on e-leadership. However, the new e-leader is required to execute these objectives electronically on computer-mediated virtual teams that are geographically and temporally dispersed (Luther & Bruckman, 2010).

Research on current leadership and management has garnered significant interest in recent decades; nonetheless, it continues to be disproportionately concentrated on English-speaking Western cultures (Ansell & Boin, 2019). The leadership process is the most promising approach to a current and practical concept of leadership (Behrend et al., 2017). Recent studies identify passive-aggressive behaviors as a prevalent form of toxicity in organizations. Kusy & Holloway (2009) found that half of the people facing toxic interactions shifted their focus away from work to concerns, and a quarter actively decreased their work efforts (Whicker, 1996). Toxic leaders frequently establish unreachable standards and engage in arbitrary discipline, fostering an environment in which subordinates put personal safety before productivity (Reed & Olsen, 2010). By adopting techniques of intimidation and marginalization, these leaders foster an environment of fear and compliance. In maintaining control, toxic leaders frequently establish scapegoats and out-groups, blaming all organizational troubles on these entities (Lipman-Blumen, 2005b). This conduct not only detracts from positive work but also reinforces a culture of blame and division. Toxic leaders are distinguished by their authoritarian and haughty approach, which frequently demonstrates emotional instability that erodes a strong workplace culture (Robbins, 2001). Their leadership style involves participating in punitive measures, withholding praise or sup-

port, and public verbal abuse (Tepper et al., 2001). These chief executive officers often prioritize their interests above the welfare of the organization and its personnel.

Organizations in the present day must be adaptable and nimble in response to the evolving environment. Leaders must devise methods for incorporating learning into their daily work experiences in order to adapt to change. This prompts the inquiry: How do leaders encourage learning at the individual, group, and organizational levels? Several studies have investigated the potential mediating and moderating variables and the links between leadership and learning. Nevertheless, it is challenging to ascertain the extent to which leadership contributes to individual, group, and organizational learning due to the large and fragmented nature of this research. As a result, it is essential to assemble and evaluate the existing research. The approach of building in-groups and out-groups, which toxic leaders typically employ, is usually employed to blame the latter for any troubles. This method efficiently consolidates their control and influence (Conger, 1990; Ashforth, 1997; Adams Becker et al., 2017; Zhang, 2019). This tactic of division not only diverts personnel from their duties but also fosters an environment of internal conflict and distrust. Toxic leaders are identified by their punishment-oriented mentality and their incapacity to distinguish between personal emotions and professional issues (Kusy & Holloway, 2009). In order to cultivate an environment of internal conflict and deviation from corporate objectives, they manage by rewarding loyalty and appealing to it, frequently at the price of skill. As a consistent outcome of the toxic leader's insistence on loyalty and obedience, informal ties and bonds among followers are suppressed. They propose that the organization's survival is contingent upon the allegiance of its followers, so establishing a siege mentality. It is crucial to maintain firm control over the flow of information and to suppress criticism, dissent, initiative, and originality. This strategy is employed to achieve this goal (Conger, 1990; Ashforth, 1994; Lipman-Blumen, 2005b). The term "toxic leadership" refers to a variety of adverse actions that not only hamper company achievement but also harm staff morale and productivity. The significance of a more thorough understanding and proactive attempts to mitigate the consequences of toxic leadership in the workplace is underscored by the broad influence of these leadership styles across various organizational levels (Robbins, 2006).

Leadership is frequently praised as the guiding force that influences the fate of organizations, teams, and civilizations. An atmosphere of growth and production is fostered by effective leaders, who inspire and encourage their followers (Di Stefano, Scrima, & Parry, 2019). Nevertheless, not all leadership is made equal. A terrible phenomenon known as "toxic leadership" lurks in the shadowy corners of leadership, casting a cloud over the individuals and situations it affects (Yukl, 2006). In recent years, the term "toxic leadership" has attracted an increasing degree of attention and public concern (Nauman, Khan, & Ehsan, 2009). It comprises a range of actions and qualities that are exhibited by leaders who, instead of fostering their teams, establish a toxic environment that is defined by fear, mis-

trust, and dysfunction (Goulet & Frank, 2002). The repercussions of toxic leadership are extensive, influencing the micro and macro aspects of institutional culture and performance, in addition to the immediate sphere of its effect. Toxic leadership can take on a variety of forms, including overt violence and widespread toxicity, as well as more subtle, nonviolent behaviors that are frequently observed in corporate settings (McBeath et al., 2018). Several scholars have been motivated to create taxonomies of toxic leadership as a result of the diversity in harmful practices. These taxonomies, as presented by Pelletier (2012), focus on defining specific behaviors rather than profiling toxic leaders, an approach previously adopted by (Whicker, 1996) and (Kellerman, 2004). The objective of this investigation is to examine and assess the global culture, social change, globalization, traditional, modern, toxic, and successful leadership styles and practices, as well as organizational behavior, in order to provide a global perspective on contemporary leadership. This will be achieved by analyzing primary and secondary information, reviewing books, journals, and other research materials, and incorporating the ideas and thoughts of contemporary scholars. In this study, the researcher has decisively reviewed and explored the leadership roles in the 21st century and their contribution to strategically developed contemporary organizations to avoid toxic environment. Moreover, investigations have been carried out to endorse leadership styles and level of efficiency relating to strategic development of organizations and advanced technological innovation in the era of 4th industrial Revolution or 4IR (Madzar, 2001). Arguments and evaluation will be based on how leaders' efficiency, activity, style, action and their reliability affect organizations. Efforts will be made to prove that management changes to leadership within a competitive global economy and technological changes provoke strategically developed organizations. This study also promotes a transition to the recognition and integration of global viewpoints from a variety of places, which is crucial for resolving the intricacies of contemporary leadership practice, difficulties, challenge, and leadership success in the 21st century.

3. History of Technological and Industrial Revolution

Our ability to transmit and receive information enhances our abstract thinking, which distinguishes humans from animals. Our superior intelligence propelled us to the top. As it advances slowly, human technology would have taken one million years to become economically practical enough to support an additional million people compared to a few hundred thousand years ago. The 5,000 BC Agricultural Revolution shortened this period to two centuries. In the post-Industrial Revolution era, it further dropped to a mere 90 minutes. Radical changes to the world as we know it could result from technological advancements such as the development of super-intelligent (SI) machines. In 2014, the idea of superintelligence was examined concerning the potential effects of creating a machine more intelligent than humans on society. These discussions are filled with data, numbers, and studies from various disciplines, creating a comprehensive view of the super-in-

telligent future and how we might reach it. Nonetheless, the current focus is on the state of existing technology. We have already succeeded in creating machines capable of learning and reasoning by processing information input by humans. For instance, automatic spam filters that protect critical messages and prevent bulk emails from clogging our inboxes are a great example. Nevertheless, this is still a significant distance from the “general intelligence” that humans possess and that has been the objective of AI research for many decades. Additionally, the creation of a super-intelligent machine that can learn and function autonomously may yet be decades away. However, the area is advancing rapidly, and a machine of this nature may be available sooner than anticipated. Its intelligence has the potential to influence our lives significantly, and it may even pose a threat, as it may be too sophisticated for us to disable in the event of an emergency (Bostrom, 2024).

Technology can be developed by mimicking human intelligence; however, imitation appears in many forms. Therefore, although some scientists support the creation of a computer that replicates humans through artificial intelligence, others favor a precise duplication of human biology, which could be achieved through methods like Whole Brain Emulation (or WBE). Most of humanity’s most significant discoveries have been made either by individual scientists reaching a goal before others or through extensive global collaboration. A single super-intelligent computer could likely be created if a group of scientists quickly identified solutions to the challenges hindering AI and WBE. This is due to the competitive nature of the field, which may necessitate that such a group operates in secret. Before we become frightened by the imminent machine-led catastrophe, let us examine the potential for the advancement and use of general intelligence technology. The widespread manufacture of robots capable of executing jobs that presently need human hands and minds is likely to be facilitated by the greater availability of technology and the declining prices (Tegmark, 2017). This implies that machines will not only replace the whole human labor but also be easily replaced. The economy, as well as our lifestyles and wants, will undergo a profound transformation as a result of a robotic workforce. As machine labor becomes the new, cheaper standard, the wages of workers will decrease to the extent that no human will be able to sustain themselves on a salary (Bunker, 1997). Furthermore, a small number of employers in the mechanical industry would accumulate enormous quantities of money. This, however, returns us to a prior debate, as the eventual destination of the money is contingent upon whether a single, exclusive group creates SI or arises from a slow, communal process. Most individuals would be restricted in their ability to generate income if the former is accurate, since they would be forced to rely on their savings or pensions or rent houses to others (Smith, 2019). However, the growth of SI is associated with a multitude of safety risks, which, in the most extreme situations, might result in the annihilation of humanity. While it is possible to establish specific protections by examining the reasoning behind the SI we develop, this alone will not be enough.

3.1. Industrial Revolution and Consequences of World

The global economy is being basically transformed as we articulate, by breakthroughs in advanced and smart technologies, cutting across the physical, digital, smart, biological and intellectual worlds. Emerging technologies such as automation, robotics, AI, ML, DL, IoT, big data, blockchain, are changing the way the world operates (McGee & Reis, 2012). The industrial revolution continues worldwide and is an ongoing process. It may be explained by transition from hand production to machine based manufacturing, profoundly transformed societies and had global consequences. It led to increased production, lower prices, and economic growth, but also resulted in social problems like worker exploitation and environmental degradation. Innovations like the steam engine, power loom, and mass production techniques revolutionized industries and spurred further growth. It significantly widened the gap between industrialized nations and the rest of the world, contributing to the rise of Western dominance (Shin et al., 2014). AI is set to reshape and disrupt service models and products. Although technological progress mainly enhances manufacturing efficiency, innovative and disruptive service models crafted through big data analysis of individual client needs rather than company demands will reshape the service industry (Rada & Schaller, 2024). The timeline of industrial development is outlined below.

INDUSTRY 1.0: INDUSTRIALIZATION: Industry 1.0 signifies the commencement of the industrial era in the 18th century, which was distinguished by the initial application of machinery to manufacture products and services and known as 1st industrial revolution. The rise of railways, coal mining, and heavy industry was among the most significant advances. The steam engine was the most significant invention of this age, since it led to social turmoil and the displacement of numerous workers. Steam engines were initially implemented in industries in Great Britain during the late 18th century, which facilitated industrialization by offering a versatile energy source that could be utilized in any location (LIMS, 2023).

INDUSTRY 2.0: ELECTRIFICATION: In the late 19th century, the 2nd industrial revolution was initiated with the introduction of electrification. During this period, the assembly line, which was first employed in the automobile sector, evolved into the industrial counterpart of the steam engine, facilitating the automation and acceleration of manufacturing processes. In Industry 2.0, the division of labor is evident in the sequence of particular tasks that workers undertake, which has resulted in the emergence of serial manufacturing. Additionally, the initiation of international shipping technologies, which included aircraft, enabled the first-ever automated transportation of products between continents (Hossain, 2023a).

INDUSTRY 3.0: DIGITALISATION: In the 1970s heralded the beginning of the third industrial revolution, which was characterized by the development of electronics-driven automation and information technology. Personal computers and the internet became widely adopted, which greatly integrated technology into the workplace. Consequently, labor procedures were increasingly automated, and

access to information grew worldwide. Furthermore, robots displaced human labor in mass production. This tendency, which was escalated throughout Industry 4.0, was already imminent at that time (Hossain, 2023b).

INDUSTRY 4.0: AUTOMATIZATION: Industry 4.0 involves integrating cyber-physical systems (CPS) into manufacturing and logistics, and using the IoT to connect everyday products in an advanced technological era and that is known as 4th industrial revolution or 4IR. Services in industrial processes affect value generation, business models, downstream services, and work organization (Alderman, 2021). CPS refers to network connections between people, machines, products, objects, and ICT systems with inclusion of smart technology like AI, IoT, ML, DL, big data, blockchain, etc. In the future, there will be over 100 billion connected gadgets. AI in the service business distinguishes the 4IR from the 3IR.

In industrial production, the term automatization is defined by four fundamental components: 1) Machines manage production operations. The future of production will be mostly automated, with people only contributing on select occasions, thanks to intelligent technology. This tendency is exemplified by the “smart factory”, which is characterized by minimal or no human presence (Otles, Grumezescu, & Holban, 2019). 2) Industry 4.0 is fundamentally characterized by real-time production. An intelligent machine determines the production facility’s optimal usage capacity. In the production process, lead times are brief, and standstills, excluding those caused by technical defects, can be prevented. The coordination of resources, information, and commodities is precisely tuned to meet the demands of the value creation chain. Stocks are maintained at a minimum; nevertheless, the machine automatically purchases additional supplies when the quantity necessary for manufacturing falls below a certain threshold. The same idea applies to finished items; the machine produces under the total demand and incoming orders, hence minimizing storage expenses (Rotatori, Lee, & Sleeva, 2021). 3) Decentralization of production: The machine is largely self-organized, including a network of manufacturing units. In addition to material planning, order handling is entirely automated (Rifkin, 2013). 4) Customized manufacturing, even down to individual units: In the future, robots will be capable of responding to specific consumer requirements without requiring human changes, provided that they are within defined parameters. This reduces the need for changeover times. The smart factory integrates supplementary components or, in an optimally distributed process, modifies specific production steps to align with client requirements and preferences (Hossain, 2023c).

4IR is a neologism describing rapid technological advancement in the 21st century (Jaffe, Newell, & Stavins, 2003). “Mastering the Fourth Industrial Revolution” was the 2016 theme of the World Economic Forum Annual Meeting (Marr, 2016), in Davos-Klosters, Switzerland. In this era fundamental shifts are taking place in how the global production and supply network operates through ongoing automa-

tion of traditional manufacturing and industrial practices, using modern smart technology, large-scale machine-to-machine communication (M2M) (Mikalayeva, 2016), and the IoT. This integration results in increasing automation, improving communication and self-monitoring, and the use of smart machines that can analyze and diagnose issues without the need for human intervention (Philbeck & Davis, 2018). It is characterized by the fusion of digital, physical, and biological technologies, including AI, robotics, IoT, biotechnology, and nanotechnology (Ross & Maynard, 2021). According to Infosys BPM, it is transforming manufacturing and production through Industry 4.0, leading to increased automation, optimized supply chains, and personalized products. As per ScienceDirect.com, 4IR technologies are crucial for achieving universal energy access and net-zero emissions goals, enabling the integration of renewable energy, smart grids, and energy storage solutions (Hermann, Pentek, & Otto, 2016). 4IR is prompting a transformation in the education sector, requiring the integration of digital literacy, innovative teaching methods, and public-private partnerships. 4IR technologies are revolutionizing healthcare through personalized medicine, remote patient monitoring, and advanced diagnostic tools (Gronau, Grum, & Bender, 2016). It aims to harness the power of emerging technologies to create a more prosperous, equitable, and sustainable future for all.

In 4IR, there are distinct improvements in production process components, such as machinery, operational resources, software, and others, enabled by autonomous communication through sensors and related technology networks (Panagl, 2015). 4IR aims to lower production costs, especially in staff planning, thereby enhancing the company's competitive position in international competition (Hossain, 2023d). It transforms how we live, work, and relate to one another by leveraging advancements in digital, physical, and biological technologies. It seeks to integrate these technologies to create a more efficient, productive, and sustainable future, while also addressing social and economic inequalities. Famous robotics and AI examples include "smart factories", driverless automobiles, delivery drones, and 3D printers, which can build very complex objects from a template without human intervention. Popular service models include Facebook, Amazon Mechanical Turk, Uber, Airbnb, car sharing, Spotify, and Netflix. Sharing services alone will increase sector turnover twentyfold in ten years, according to studies (Bloomberg, 2016). However, 4IR has been designed with smart technology to streamline processes, reduce costs, and optimize resource utilization in various industries, leading to increased productivity and efficiency. It is nurturing the materialization of new industries and job opportunities, particularly in areas like AI, robotics, biotechnology, smart shipping, smart transportation, smart healthcare, and data science, requiring a skilled workforce. The World Economic Forum declared that, 4IR technologies can play a vital role in addressing environmental challenges by promoting sustainable energy solutions, optimizing resource management, and reducing pollution. A key aspect of 4IR is a human-centered approach, focusing on enhanc-

ing human well-being, preserving cultural heritage, and promoting social values (Schwab, 2016).

3.2. Impact of AI in the Era of 4IR

For an extended period, artificial intelligence has been ubiquitous. Its advantages are consistently improving our everyday life. The technology is employed in internet search engines to offer ideas and in robots that welcome customers at shopping centers (Housman, 2018). Currently, AI systems imitate human analysis. It denotes the capacity of a computer program to learn and think. AI may be defined as any system that involves a program executing activities that are generally associated with human intellect. Numerous advantages have been realized in a variety of sectors as a result of the advancements in AI (Jordan & Mitchell, 2015). Currently, the availability of handy technology is ubiquitous, and forecasts are getting more accurate. Additionally, procedures are efficient and effective. AI optimizes disaster recovery and data backup solutions to guarantee uninterrupted company operations. The necessity of a strong business strategy, a clear vision, and good IT management persists, despite the perpetual evolution of the essential components of successful technology and IT leadership. Furthermore, the need for a well-informed approach to risk, compliance, outsourcing, and AI remains unwavering (ARC5G, 2019).

Digital existence is augmenting human potential while disrupting traditional human activities. Over fifty percent of the global population currently utilizes code-driven systems, which provide referable possibilities alongside unprecedented obstacles (Rodríguez-Abitia & Bribiesca-Correa, 2021). To guarantee uninterrupted corporate operations, AI optimizes disaster recovery and data backup solutions. The necessity of a strong business strategy, a clear vision, and good IT management persists, despite the fact that the fundamental elements of successful technology and IT leadership are always changing. Additionally, the need of a well-informed approach to risk, compliance, outsourcing, and AI remains unwavering (Karacay, 2018). Experts anticipate that networked AI will improve human efficiency, but it will also compromise human autonomy, agency, and capacities (Anderson, 2018). Computers can outperform humans in complicated decision-making, learning, reasoning, pattern recognition, visual perception, speech recognition, and language translation. Intelligent systems in cities, cars, buildings, utilities, agriculture, and commerce may save time, resources, and lives and provide inhabitants with a more customized future (Cosgrave et al., 2013). The potential of AI in healthcare is exciting, with uses ranging from patient diagnosis and treatment to enhancing the quality of life for the elderly. The working relationship between human and robots will be normal in near future (Figure 1 below). In particular, they were enthusiastic about the prospect of AI participating in a comprehensive public-health program that would make use of the potentially massive quantities of data on topics as diverse as diet and individual genomes that may be collected in the years to come. AI might facilitate much-needed changes to formal and informal education.



Figure 1. AI and the future of life and working relationship between human and robots (Rodríguez Abitia, 2021).

As a result of integrating AI and the Internet of Things into our daily lives, our society is undergoing noticeable changes. Machines driven by artificial intelligence will soon be able to take our pulse in hospitals, and online retailers will soon be able to tailor their product recommendations to each shopper. These are just a handful of the many ways in which AI improves human lives. In the future, AI will offer much more. More and more businesses, nonprofits, and government agencies will start using this game-changing technology to streamline and enhance every aspect of human life as time goes on (Affia et al., 2021). AI can streamline and accelerate operations in the community, society, country, and globe in a variety of ways, including by improving workplace efficiency, helping people make better decisions, and offering direct support. Role of AI in education system is auspicious and wide spread. The future education system will be transformed and revolutionized (Figure 2 below). AI has the potential to assist by identifying and resolving issues that individuals may not be able to recognize or resolve on their own. Some individuals, however, do not recognize the benefits of artificial intelligence because they believe that it would result in people losing their jobs and becoming less intelligent. The most significant advantages of artificial intelligence are its speed, precision, efficiency, and scalability.

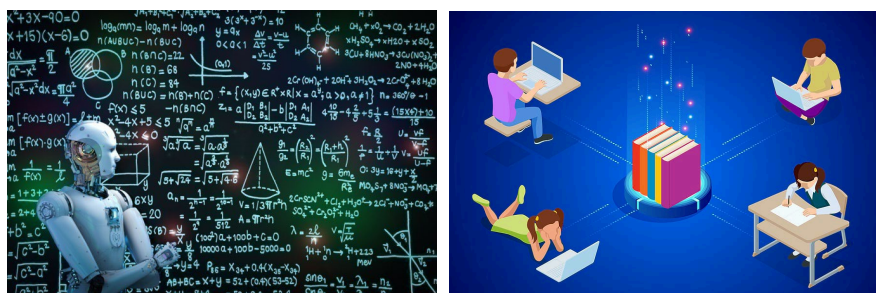


Figure 2. Role of AI in education system (Zerfass & Huck, 2007) and revolution of future education system (Mainelli, 2017).

A significant portion of the current work will become unavailable over the next 25 years due to the 4IR's profound impact on various industries, service sectors, and other areas. We need to have a comprehensive understanding of the effects that these shifts will have in every aspect of our lives, including educational and

scholarly establishments (Gulati et al., 2015). These days, grads face a world where technology has changed everything. There are several advantages and disadvantages that traditional educational institutions face as a result of AI, the internet of things, machine learning, big data, cloud and edge computing, and social media. As they plan for life beyond high school or college, traditional educational institutions worry about their students' futures, especially in terms of employment. The widespread influence of AI-powered contemporary technology is changing the world in fundamental ways, and as a result, ideas like "post-work" are starting to shape our era. Because information technology (IT) is now the main driver, the skills needed in this period are very different from those in the Third Industrial Revolution. The artificial intelligence and other smart technologies industries are projected to reach a value of fifteen trillion dollars in the US during the next seven years. In future robots will work with human and great technological revolution is imminent (Figure 3 below). There will be mass layoffs of those who have had conventional schooling but lack the necessary abilities (Kurzweil, 2005). Conversely, the next few years will see the establishment of millions of positions that require modern and high-tech skills (Harris et al., 2018).



Figure 3. In future robots will work with human (Nicole, 2018) and technological revolution (Qureshi, 2017).

4. Advancement of Technologies in the Era of 21st Century

In the present day, the integration of networked gadgets into our daily lives is revolutionizing computing through advanced technologies like IoT. In order to provide an ever-expanding array of services and human living, these gadgets collect and analyze data. The intelligence of other technologies is enhanced by the IoT, which enables automation, customization, and remote control through networks of Internet-connected sensors (Hossain, 2023e). Concurrently, the significant privacy concerns that IoT technology generates may limit its wider adoption. In the future, the IoT will have a greater impact on technology, and a greater number of objects will be connected to the Internet. It is an analytical piece that endeavors to demonstrate the influence of IoT on technology and gadgets in a variety of sectors, such as our everyday lives, enterprises, and industries. Furthermore, it offers suggestions and challenges for getting the most favorable result within the

present term (Apthorpe et al., 2019). Organizations can leverage the vast amount of data generated by billions of internet-enabled sensors worldwide to enhance operational safety, monitor assets, and minimize the need for human intervention (Hossain, 2023f). IoT has the potential to improve the quality of our daily lives, increase output, and improve the efficiency of companies. Concurrently, the Internet of Things will have a substantial influence on other technologies, and a higher number of items will be connected to the Internet in the future. Now, the global number of active IoT devices exceeds 17 billion, and more than 85% of firms have improved their technical efficiency by integrating IoT technology into their products. As its impact on the daily lives of humans continues to expand, the IoT has been referred to as “the next wave of innovation”. Benefit of AI in automobiles and in healthcare is remarkable and very promising (Figure 4 below). In the 21st century, the IoT is essential for the functioning of large-scale corporations and service sectors. Furthermore, it has been proven that the IoT significantly impacts corporate operations management and decision-making (Djelassi & Decoopman, 2013).

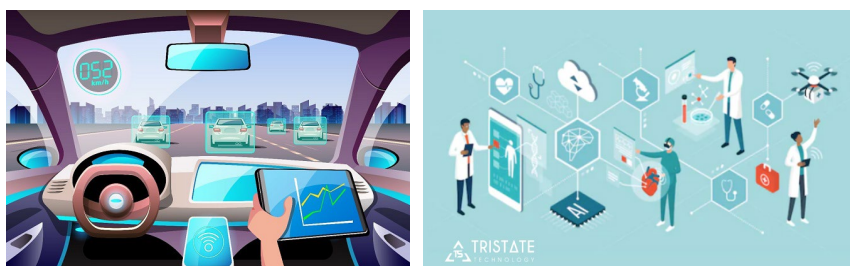


Figure 4. Benefit of AI in automobiles (Telematics Wire, 2022) and benefit of AI in healthcare (Zhai et al., 2020).

The manner in which we conceptualize and debate technology has undergone an equally seismic transformation in the present era, concurrent with its explosion. AI technology is sufficiently advanced to replicate the human brain or cognition. It allows computer programs to learn from experience through algorithmic training and iterative processing. Daily, AI is growing more and more imaginative and valuable in practically every aspect of life. Artificial intelligence has become a significant concern in the contemporary period due to its ability to influence the job market and overall employment. The majority of people believe that the widespread adoption of AI would result in employment losses for individuals (Hossain, 2023c). However, there is a growing consensus among humans that AI can enhance the adaptability, creativity, profitability, productivity, and accessibility of their jobs. A more competent, diversified, and imaginative economy has the potential to be the product of AI (Hossain, 2023h). The educational system, which encompasses the curriculum, teaching practices, and various other educational components, needs to be revised. The whole educational system will be transformed by the integration of modern and advanced technologies into our mass or general education system. It must be both sustainable and meaningful in the long term. The researcher has conducted an analytical study in which they have at-

tempted to evaluate the future of mankind and the diverse uses of AI and robots, with a special focus on the global education system. In the past several years, there has been significant advancement in the disciplines of AI, robotics, and machine learning. Automation and the broad use of AI can help companies, firms, or industries enhance their production or service by reducing errors, improving quality, speed, accuracy, and integrity, and, in most cases, achieving goals that are beyond human capabilities (ChLok, 2019). Recent advances in artificial intelligence and similar automation technology have rekindled concerns about job losses and increasing inequality. Even in wealthy nations, this is a common issue. Because their worldwide competitive advantage rests on the availability of large quantities of natural resources and labor, developing countries and emerging market economies have every reason to be more worried than high-income countries. In a world that is both labor-intensive and quickly globalizing, there is a risk of even further loss of control due to the winner-take-all dynamics brought about by new communication technologies and the falling returns on natural resources and labor. AI is a game-changer in the manufacturing industry and it will boost the agriculture sector (Figure 5 below). This might derail the tremendous development of the last half-century. On top of that, it might make it harder for communities all around the world to overcome poverty and injustice.



Figure 5. AI is a game-changer in the manufacturing industry (Rost, 1993), and AI will boost the agriculture sector (Fossum, 1989).

Future threats from AI may be rather substantial. The global economy will shrink in size and the demand for human labor will decrease as a result of AI, IoT, ML, and automation. The purpose of AI in education is not to replace human instructors with humanoid robots. Nevertheless, the objective is to enhance the efficiency and effectiveness of the education system by utilizing computer intelligence to assist students and teachers. The educational experience will be significantly influenced by the numerous AI tools that will be used in the future. Again, who knows? Perhaps in the future, emotional interactions between humans and robots will be feasible. There were previously other films that explored this concept. Nevertheless, there is a significant amount of ambiguity surrounding the potential technological development scenarios and their implications (Hossain, 2023i). AI in education is not about the incorporation of humanoid robots as instructors to replace human educators. However, the primary objective is to enhance the efficiency and effectiveness of the education system by

utilizing computer intelligence to assist students and instructors. There will be several AI technologies available to the school system in the future, which will significantly influence the educational experience. Once again, who knows? Perhaps in the future, emotional interactions between humans and robots will be feasible. Several films have already explored this concept. However, the potential technological development scenarios and their implications are still subject to a significant degree of uncertainty (Oberhaus, 2018). Conversely, AI can generate substantial advantages for both industrialized and developing nations, regardless of their income options (ChLok, 2020). The potential of AI to provide new and creative work possibilities is also there, which might result in a more efficient and productive economy (Padula, 2023). Employment that generates is often eliminated by any technology. It is a fact that the world will grow more complicated and self-centered in the future as a result of the progress of AI. Additionally, there will not be sufficient jobs to accommodate everyone, and employment will not be guaranteed. Today cybersecurity and network security is vital and AI will change the finance sector deeply (Figure 6 below). Therefore, it is imperative to provide the younger generation with useful skills and modern technical education. Consequently, it is imperative to provide a sensible remedy to the existing education system (Means et al., 2020).



Figure 6. Cybersecurity vs. information and network security (Blog Security, 2020). AI will change the finance sector (Namita, 2023).

5. Impact of Robot and Consequences of World

As we know that, sequential procedures designed to solve problems or accomplish specified purposes are known as algorithms. In the field of AI, algorithms are pre-programmed instructions that tell a machine what to perform. These mathematically-based instructions might be as basic as “if X, then Y” or as complicated as several mathematical layers that work together to accomplish a task or solve an issue. The algorithm sorts, adds, replaces, or searches for certain data attributes among its many data modification algorithms. When problems arise, following the directions can solve them. The expected results and the data type used to train the software determine whether machine learning is supervised, unsupervised, semi-supervised, or reinforce learning (Fumo, 2017). When we hear about a machine that can learn, what we really mean is that it is carrying out a structured set of mathematical operations. Using either the data utilized to train the program or

the data utilized by the application after deployment, the machine may learn to fix itself. How well a machine can learn and fix itself depends on whatever mathematical models are used for the job (Menzies, 2003). Application programmers rely on mathematical models, which are chosen and optimized by data scientists and ML practitioners (Schatsky et al., 2014). A “node” is a set of mathematical instructions used in deep learning, similar to an algorithm. Like a neuron, this node receives instructions from higher-ups in the network, processes them, and then sends the results on to another node. This output is subsequently used as input by the subsequent node. Today robots are working in industry and digital revolution already happened (Figure 7 below). The data’s route between nodes is decided by the algorithm. These nodes, linked in several layers, might number in the billions in a deep learning model.

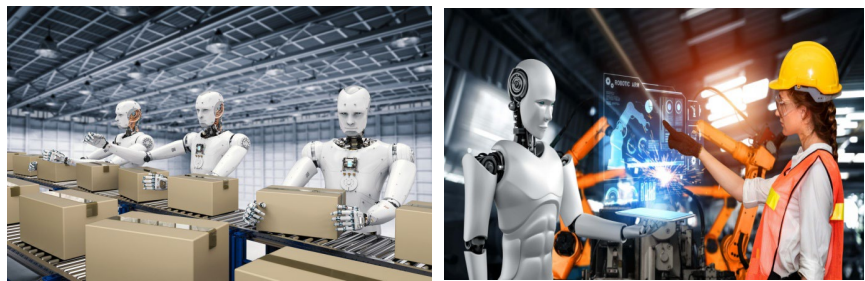


Figure 7. Robots working in industry (Kant, 2018) and digital revolution relate technology and human (Sun, 2016).

In the future, robots and automation will function as assistants, workmates, instructors, doctors, drivers, operators, and explorers. Engineers, technicians, and scientists will keep improving and developing robot technology, thus their capabilities will keep growing. In many ways, robots are already indispensable to modern life. They have the potential to enhance our understanding of the world and its inhabitants, which might improve the quality of life for countless people (Iorga et al., 2018). Today, robots have become a common sight in our lives and have been in existence for a longtime. In warehouses and factories, they are deployed to relieve individuals of repetitive, tedious, dangerous, or unhygienic activities or obligations. Undoubtedly, safety is one of the most significant concerns when contemplating the replacement of humans by robots. Today robots are working with human and understand human feeling and which has been shown in Figure 8 below. As the utilization of advanced AI and automation continues to evolve, and as a growing number of organizations adopt automation, the issue of robots inflicting injury or, in some instances, killing their human coworkers has become much more pressing. A semi-autonomous Tesla vehicle was involved in a fatal collision with a tractor-trailer in Florida in 2016, and the incident was covered in an intriguing article by Forbes. Similarly, a robot in an industrial setting killed a German manufacturing staff member in 2015, and a robot in Michigan killed a worker in 2017. Regardless, according to the Future of Jobs Report, over 80% of CEOs are speeding up their attempts to

digitalize labor processes and incorporate new technology. Half of the companies surveyed expect the automation of some tasks within their companies to pick up speed. The McKinsey Global Institute said in their research “Jobs Lost, Jobs Gained” that in this age of AI, the workforce is seeing a shift toward automation. In addition, they predicted that by 2030, almost 14% of the world’s workforce, or 375 million people, may have to acquire new skills related to artificial intelligence, automation, and digitalization (Bessen, 2015). Today robots are using as social being and which has been shown in **Figure 9** below.

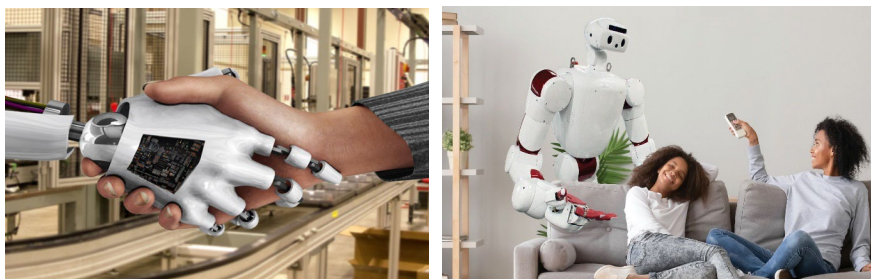


Figure 8. Robots working with human (Knight, 2013) and digital revolution relate technology and human (Zuiderwijk et al., 2021).

The most prevalent course in all sophisticated companies appears to be the upskilling of employees. For instance, Amazon’s “upskilling 2025” project has disclosed its intention to allocate \$700 million to the retraining of one-third of its workers in AI or automation capabilities. Just as before, 52% of manufacturing workers surveyed for PwC’s “shaping the future of manufacturing” and Digital Factories 2020 projects felt their company did not have a genuine digital culture. They concluded that involving and training workers in technologies at the earliest stages can serve as a complementary approach to good risk assessment and the comprehension of possible safety concerns. In reality, safety and training are inextricably linked, as ensuring all employees are educated to follow safety procedures helps mitigate the likelihood of on-site accidents and injuries, regardless of their level of expertise. The training of the safe usage of robots extends beyond the installation of technology. To ensure personnel can operate machinery properly, they must undergo frequent training, as national safety requirements for the manufacturing industry are periodically updated. In order to enhance human safety, the safety of robots must be ensured in the long run. MIT is exploring one way to achieve this (Satyanarayan, 2025) in collaboration with the automobile manufacturer BMW (BMW, 2025). Through the use of simulations, algorithms may be developed to assist robots in closely observing and interacting with people, for example in an assembly line for automobiles. The secure functioning of robots also depends on regular and thorough maintenance (Shafiq et al., 2022). Consequently, the future of AI and robotics will provide a variety of thrilling opportunities that are suitable for high incomes and significant professional advancement. Formal education, certification, practical training, job experience, and skill development can collectively increase the likelihood of a new generation securing a meaningful career in the industrial and service sectors.

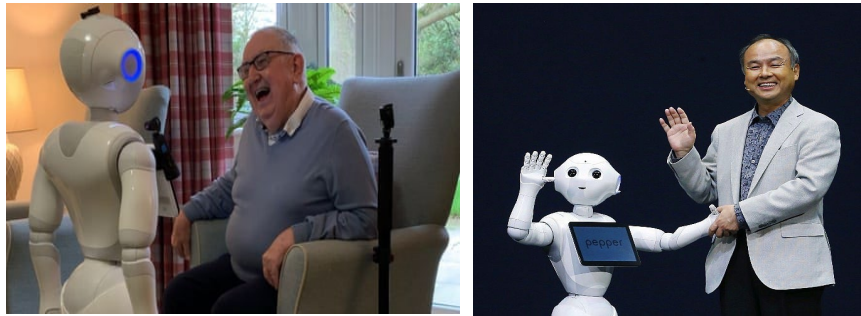


Figure 9. Example of a few modern robots (home care robot, emotional robot) (Booth, 2020; Alsuhi & Khattab, 2019).

Now, social robots are programmed to mimic human behavior while interacting with humans (Emotional Robots, 2025). Sophia is a social robot designed to serve as a companion for the elderly, demonstrating how technological advancements can enhance the functionality of robots (Greshko, 2018). In 2018, Sophia was redesigned to include mobility features and became the first robot to receive citizenship in a country (Saudi Arabia) (Hatmaker, 2017). Miko is a robot capable of understanding human emotions. Miko experiences a range of emotions (and a few tricks up its sleeve). In addition to acknowledging your presence and addressing you by name, it is crucial to acknowledge your mood and cultivate a more profound comprehension of you regularly. Are you in need of a chuckle when you are feeling down? A dance while you are feeling uninterested? Miko is currently fixing the issue. It is not merely the most intelligent robot you will ever encounter. It is also your friend. Miko's persistent curiosity compels you to participate in games and motivates you to utilize your cognitive capabilities. Miko is as at ease initiating a conversation as he is organizing a dance party; his single deficiency is a partner-in-crime (Miko Mini, 2024). There are examples of few modern robots and that has shown in Figure 10 below. PARO, an advanced interactive robot, was developed by AIST, a notable Japanese industrial automation pioneer. It facilitates the provision of the well-established benefits of animal therapy to patients in settings such as hospitals and extended care facilities, where live animals provide logistical or therapeutic obstacles (Parorobots, 2024). Professor Einstein is a robot that provides pupils with instruction in the areas of science and general knowledge. ROBEAR is a robot that offers nursing care (Riken, 2015). Vortex, a programmable robot, is designed to instruct children in the field of STEM. Pillo is a health companion that is powered by artificial intelligence (Vortex, 2023). A robot designed for domestic use is known as Buddy (Blue Frog, 2024).

The role of nurses in providing care will change as robots gain the ability to handle nursing tasks, such as supporting ambulation, monitoring vital signs, administering prescriptions, and managing infectious diseases prevention (Finlay et al., 2014). Research suggests that between 8 percent and 16 percent of nursing time is spent on non-nursing tasks and responsibilities that should be delegated to oth-

ers (Yen et al., 2018). An additional example of robot collaboration is seen at Duke University's School of Nursing and Pratt School of Engineering. The interdisciplinary teams working on the Tele-Robotic Intelligent Nursing Assistant (TRINA) are developing a remote-controlled robot to reduce the high infection risk healthcare workers face during routine patient interactions, handling contaminated materials, and safely removing protective gear (Li et al., 2018). TRINA is currently being evaluated in the nursing simulation lab and can complete approximately 60% of the scheduled nursing tasks. However, it operates at a pace 20 times slower than a human nurse. AI is going to shape the future of humanity and we are waiting for that (Figure 11 below). By employing AI technology, the nurse's role will shift to that of a health coach, information integrator, and provider of human care, rather than being replaced them.

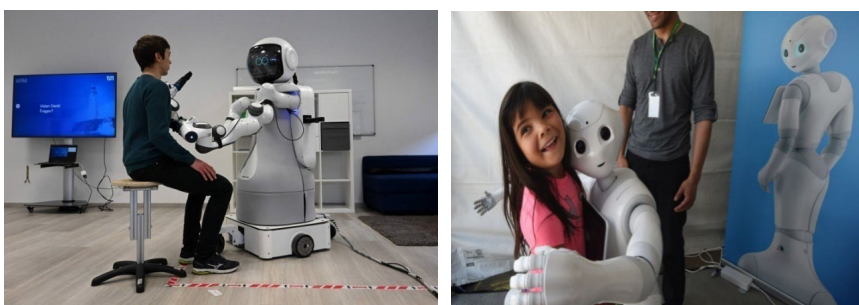


Figure 10. Example of few modern robots (Healthcare robot, Emotional robot) (Japan-times, 2023; CNN, 2015).



Figure 11. AI define humanity's future (Albert, 2019) and AI is going to shape the future of humanity (Russell & Norvig, 2003).

The paper "Jobs Lost, Jobs Gained: Workforce Transitions in a Time of Automation" was released by the McKinsey Global Institute (MGI) in 2017 (McKinsey Global Institute, 2017). This paper sparked a significant debate over the worldwide effect of AI, despite the fact that talks regarding AI replacing human employment have been ongoing since the inception of the technology. According to MGI projections, AI technologies would need the transition of around 75 million to 375 million jobs worldwide by 2030. Nevertheless, the study also underscores the creation of new roles and positions. The MGI projections are supported by American Economic Association academics, who have determined that some tasks will be amenable to automation. However, only a small number of employments can be

entirely mechanized. Additionally, they anticipate that employees will undergo training to assume additional responsibilities (Brynjolfsson et al., 2018). Despite the fact that there have been conversations regarding the potential for AI to replace human employment since the inception of the technology, this research has sparked a significant public debate regarding the global implications of AI. By 2030, MGI models anticipate that AI technologies would need the occupational transition of around 75 million to 375 million individuals globally. The study also underscores the creation of new roles and positions (Bresnick, 2018). In agreement with the MGI's forecasts, the American Economic Association experts have determined that certain tasks will be amenable to automation, but only a small number of employments can be entirely mechanized. In addition, they anticipate that employees will undergo training to assume new responsibilities. However, this research sparked a significant debate over the global implications of AI, despite the fact that talks regarding AI's potential to replace human employment have been ongoing since the inception of the technology (Federal Register, 2019). Machines are going to rule over humans in future and we are waiting to see consequences (Figure 12).

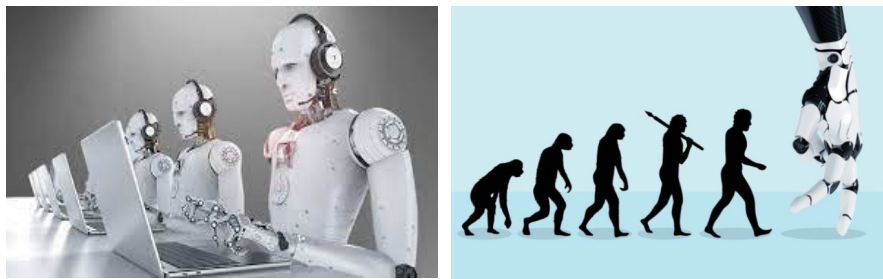


Figure 12. Machines may rule over humans in future (Luo et al., 2018) both certainty and uncertainty of life (Manyika & Bughin, 2018).

The apprehensive concern of whether or not robots would render humans unemployed arises with each new use of AI. The judges have not yet reached a conclusion. The notion that AI would automate an overwhelming number of occupations, resulting in the unemployment of millions of individuals, is vehemently opposed by several specialists. Conversely, this is perceived as a significant concern by other specialists. The organization of the workforce was undergoing a transformation, and social specialists and those who were interested in AI believed that AI was essentially replacing occupations. It enables us to construct a market that is founded on knowledge and leverage it to enhance automation for a more comfortable lifestyle (Pithon et al., 2006) may seem rather abstract, but we should be concerned about the potential for AI and robots to replace our employment (Müller & Bostrom, 2016). Nevertheless, there are some experts who have conjectured that the loss of white-collar employment, such as business analysts, hedge fund managers, and attorneys, is due to algorithms. Once more, there is considerable dispute over the impact of AI on the work-

force; nonetheless, experts concur on numerous topics that warrant investigation. Conversely, several professionals believe that the integration of AI into the workplace will generate additional employment opportunities, at least in the short term. According to Wilson, the economy will generate more jobs that will facilitate the transition as a result of the shift to AI-based systems. AI will produce more wealth than it consumes with the assistance of a few extra professionals (Peña-Mora et al., 2000). Nevertheless, it may not be distributed evenly in the outset. The modifications will be perceived subliminally and will not be discernible. The tax accountant will not receive a pink slip and will instead encounter the robot that will now occupy her desk. It is conceivable that the tax accountant will have greater difficulty in locating the same employment throughout their subsequent job hunt. The fragmentation of long-standing procedures in the workplace by AI is predicted by a small number of optimistic experts. This is expected to lead to the formation of numerous new human jobs that integrate these workflows and provide pleasure and advancement. Robots are going to replace teachers and classrooms and that has been shown in **Figure 13** below.



Figure 13. In future robots will replace teachers and Modern classrooms (Bakas et al., 2018).

The nursing simulation lab is now evaluating TRINA, which is capable of accomplishing around 60% of the predetermined nursing activities. However, it is 20 times slower than a nurse. The nurse will be supported by AI technologies to function as a health coach, information integrator, and supplier of human care, rather than being replaced by them. Therefore, these forecasts are more challenging to formulate; yet, a small number of pessimistic specialists are concerned that the abolition of these new occupations and the existing ones may occur once AI is ubiquitous. Therefore, they are uncertain about the long-term fate of such individuals. As we have already noted, there were strategies to move from farming to manufacturing to service delivery. Consequently, this is incorrect. What will be the result for the majority of those who are currently working if robots replace all jobs? We have seen that technology is more reasonable from a commercial standpoint. For example, the potential to remove up to 8 million jobs in the United States alone is a consequence of the growth of technology, including self-driving automobiles and AI like Siri and Cortana. Now question is, what about the rest of the world? The question, “What is

our purpose?” will be forced upon us when the aforementioned jobs begin to vanish. Precisely, what is the definition of productivity? We must address the world’s perpetual transformation and reevaluate the fundamental values that serve as the foundation of our society. What are the behaviors that we conduct that are useful to society and promote our values as individuals? The technology will not wait for us; therefore, we must have this talk as soon as feasible. The moment has come for us to develop a “moonshot” mentality (Builin, 2023). In order to proactively help humanity and ensure that technology fulfills social and ethical obligations, it is necessary to establish intelligent, decentralized digital networks that are inclusive and “imbued with empathy” (Shillongtimes, 2022). A unique and efficient regulatory and certification approach is necessary to ensure the best exploitation of AI for the entire human population (EC, 2024). AI and the Singularity may collapse the earth in future (Figure 14).

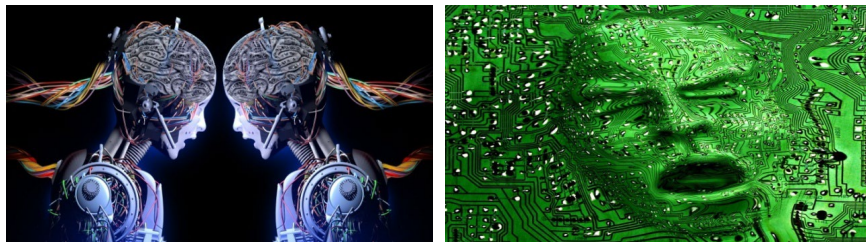


Figure 14. AI and the Singularity (Grossman, 2023), and that may collapse the earth (Orf, 2025).

AI has the potential to be both knowledge-driven and data-driven. Knowledge inference and its application to all settings are the next-generation Artificial intelligence innovation. The emergence of new fields of research and the extension of present standards to facilitate future networks may be a consequence of numerous critical problems with machine learning in 5G and future networks. Therefore, in order for AI to be implemented by a significant number of individuals and to improve, a robust security guarantee is required. Given that AI will be implemented in the transportation and healthcare sectors in the years ahead, it must be presented in a manner that fosters trust and comprehension, as well as safeguards human and civil rights. Conversely, policies and procedures ought to address privacy, security, and ethical considerations. Consequently, global communities should collaborate to advance AI in a manner that is advantageous to mankind. It appears to be more unlikely that all human jobs would be destroyed as AI is increasingly integrated into the workforce. Rather, a significant number of experts anticipate that the workforce will grow more specialized in the future. These vocations will require a greater degree of what automation is now incapable of providing, including qualitative abilities, problem-solving, and creativity (shown in Figure 15). In essence, the sector will always require personnel; but their obligations may evolve as technology progresses. A greater number of these occupations will need a more advanced technical skill set, and some skill sets will be more in demand.

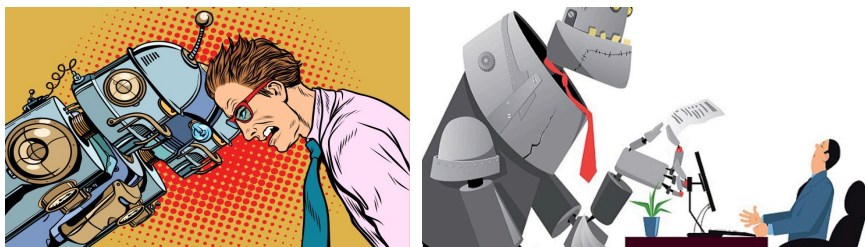


Figure 15. A Machine vs. human-battle going on (5gmonarch, 2023) and robot will outsmart humans in near future (EC Report, 2019).

6. Leadership Concept, Practice and Way Forward

The present day is characterized by the critical role of leadership in the giving of vision, devotion, direction, and inspiration to a team of individuals in order to accomplish a task or purpose that would be difficult for a single individual. Followers are the term used to describe other members of the organization, team, or group. Followers are those who align with the leader's vision and objectives. Furthermore, there is a growing interest in the investigation of followership. However, it is crucial to refrain from being bewildered by the phrases "followers" or followership. This term should never be used in a negative or disparaging manner. In order to accomplish their own obligations and individual tasks, followers may also exhibit leadership qualities. Many of the most effective leaders of the present day first acquired the skills, opportunity, and experience necessary to lead others by becoming exceptional followers. This is due to the fact that followership is a critical function. In other words, the development and appreciation of followership talents usually help the acquisition of the experience and needed knowledge necessary to become a leader.

6.1. Vision

This articulation of the organization's mission is so powerful and natural that it demonstrates the organization's potential for the future. Vision cultivates a sense of shared purpose, self-esteem, and belonging inside the organization. The senior management has established the organization's vision in the past. Modern leaders are increasingly recognizing the necessity of engaging with individuals who have a more personal understanding of the customer and the work environment.

6.2. Mission or Mission Statement

This document frequently delineates the organization's objectives and the actions that will be implemented for stakeholders and consumers. It is also important to describe the organization's unique value or services that are a result of its efforts. In general, mission statements are composed of a minimum of three components. The company's overarching aim or mission is initially defined. Secondly, a statement that delineates the principles that workers are required to uphold and commit during the decision-making process. Third, a statement of the major objectives that management considers required accomplishment of the mission. These

objectives should be consistent with the philosophical ideas that workers are obligated to respect. Today modern leaders ensure that.

6.3. Values

These are the guiding principles that determine how the personnel, beginning with management, want to conduct their company and their behavior. These principles constitute the foundation of an organization's culture and will determine the course of its development. Modern leaders are steadfast in their dedication to the values of integrity and moral courage.

6.4. Commitment

This is the emotional investment of an employee in the execution of a decision, conclusion, or objective, which includes the dedication of substantial effort. Successful and modern leaders must be dedicated and seek the commitment of others in order to achieve the target and establish objectives. Modern leaders are steadfast in their commitment and their capacity to establish excellent relationships with proper guidance (Figure 16 below).

6.5. Motivation

This is the ability to provide a justification or incentive that motivates others to take action or commit. Successful leaders are cognizant of the fact that each individual is distinctive, and as a result, they respond to a diverse array of motivators. Money is not the most effective long-term motivator, and the least effective long-term motivator is the establishment of a fearful atmosphere. This is also acknowledged by a discerning leader. Their subordinates can be successfully motivated by contemporary leaders.



Figure 16. Proper guidance (Alibabacloud, 2023) and developing relation are the prime task of future leaders (Agateno, 2024).

6.6. Consensus Building

This is the ability of a leader to forge a consensus among members of a group who have varying viewpoints. A consensus frequently occurs when a group's members agree that a certain alternative is acceptable, despite the fact that it may not have been their first choice. The development of consensus may encourage a greater degree of commitment among group members than a decision that is obtained by a simple majority. However, consensus building necessitates longer periods of dis-

cussion and may infrequently prove impossible. Modern leaders frequently must finally assume the initiative and verify that the group decision has been made to commence implementation.

7. Toxic Work Environment

Employees who are subjected to toxic work settings experience feelings of humiliation, shame, rejection, punishment, and defensiveness. The unpleasant actions of management and colleagues in this workplace are a source of difficulty for employees. Bullying, manipulation, demeaning, and screaming are among the most prevalent behaviors. Toxic work environments are characterized by a lack of inclusivity, ruthless competition, unethical behavior, stress, and contempt. Stress and burnout among employees may be precipitated by an unhealthy work environment. Some employees may combat burnout by quietly resigning and performing the shortest amount of work. In reality, toxic events are present in all organizations to a certain extent; however, if they are disregarded, employees may experience problems such as anxiety, stress, depression, and burnout syndrome (BS) as a result of the detrimental effects on their physical and psychological well-being. Additionally, they may abandon innovative ideas and productivity (Maslach, 1998). Burnout syndrome (BS) is fundamentally a dynamic process that encompasses weariness, depersonalization, and poor self-esteem or personal accomplishment. It is perceived as an issue that is precipitated by occupational therapy (OT). Additionally, BS may be characterized as a condition of physical and emotional tiredness that results in employees harboring unfavorable views toward their occupations and a diminished desire for participation. The individual who is affected by BS has feelings of helplessness, hopelessness, and powerlessness. In the link between OT and BS, stress produced by OT plays a key role. The reason for this is because stress is one of the detrimental effects of overtime on employees (Colligan & Higgins, 2006).

The prolonged impact of stress is one of the most significant reasons for the emergence of BS (Maslach et al., 2001). Burnout is the consequence of continuous stress resulting from employment, according to Schaufeli and Enzmann. These reasons are substantiated by a variety of research in the literature, which demonstrates that occupational therapy has a beneficial impact on behavioral science (Rasool et al., 2021). BS is not the sole harmful consequence of OT on employees (Srivastava & Tang, 2021). BS is concurrently a significant contributor to depression (Bauernhofer et al., 2018). BS and depression are occasionally used interchangeably as a result of their similarities. The literature contains research that indicates that BS causes depression, as well as studies that suggest that BS is caused by depression (Collier et al., 2022). Organizations typically use a succession of CEOs following the replacement of a problematic leader with another in order to identify the most suitable savior. In essence, they are reorganizing the seating on the Titanic. Consultants and coaches may aim to ease the symptoms of toxicity; nevertheless, they will only achieve long-term results by addressing its fundamen-

tal causes (Fourné et al., 2019). The indicators of a hazardous work environment may differ depending on the person, their working methods, and their triggers. An employee's physical health can be significantly impacted by prolonged exposure to a hazardous work environment (Shaw et al., 2011). A variety of stress-related diseases, including sleeplessness, digestive problems, headaches, and impaired immune systems, are prevalent. This not only impacts individual employees but also results in higher absenteeism, which in turn reduces overall productivity (Bhive Workspace, 2023). However, there are some common characteristics of a toxic workplace to watch for, including the following:

7.1. No Room for Mistakes

There is no one who wants to make errors; but employees who are paralyzed by fear of making errors indicate a hazardous atmosphere. Often blame-heavy, a frightening atmosphere induces employees to dread punishment for failures or errors (Di Vaio et al., 2022). People are apprehensive about venturing outside their comfort zones, which might result in the team as a whole experiencing hardship (Housman & Minor, 2015). Toxic leaders often micromanage, monitoring every aspect of employees' work and failing to delegate tasks and responsibilities and which are indicating a lack of self-assurance in their team and fostering bitterness and indifference. Such leaders can lead an organization and final result is increased stress, anxiety, depression, and burnout among employees

7.2. Lack of Trust

Toxic leaders usually infringe trust through dishonesty, blaming others, and deflecting accountability and that undermines confidence in the leadership and the organization. A lack of trust among employees is a common characteristic of toxic work settings (Adams Becker et al., 2017). The personnel may be continually monitored by management, as they may not have confidence in them. Micromanagement frequently induces people to question their capabilities (Sull & Sull, 2023). Toxicity results are lack of clear communication, frequent changes without explanation, and which create discrimination, confusion, and disbelieve.

7.3. Role Confusion

Employees may experience anxiety around expectations in the absence of clarity on their jobs and duties. This has the potential to result in workplace dysfunction. Conflict may also occur among colleagues on accountability and the allocation of tasks. This conflict can be avoided by the establishment of clear expectations regarding one's job (Baillie et al., 1989).

7.4. Mental Stress

Mental stress may begin to manifest itself physically in a toxic work environment. "You may have a sense of heightened alertness in your body and brain, which is quite accurate. Our brains are always monitoring for potential dangers, and as far

as your brain is concerned, you are in danger”, Quinn explains. Prolonged periods of being in “fight or flight” mode can have a detrimental impact on your long-term physical health. You may begin to suffer some of the more prevalent symptoms of stress, anxiety, or depression, such as exhaustion, pains, panic attacks, and digestive troubles (Dao et al., 2023).

7.5. Office Gossip

It may be customary to engage in some form of office gossip. Nevertheless, rumor is typically more severe in hazardous work environments. Individuals make snarky remarks, gaze, and whisper instead of engaging in direct conversation. This is not a harmless activity, as workplace bullying can result in anxiety, exhaustion, and despair. Negative communication among employees results in drama, diversions, distrust, and damaged feelings. Gossip may contribute to a hazardous work environment by encouraging employees to disseminate harmful rumors and turn on one another (Bitting, 2011).

7.6. High Turnover Rates

A company’s work culture is shown by its high staff turnover rates. There are several reasons why individuals leave their employment, including inadequate compensation, inadequate career prospects, and inadequate organizational culture. When there are few long-term employees, it may indicate a hazardous work environment (Shaw et al., 2011). In a toxic work environment, people begin to psychologically disconnect and disengage from the task, their team, and the firm as a whole (Chron, 2024). Experts have seen this phenomenon to extend to virtual worlds, where individuals may refrain from using their webcams during meetings and communicate only through brief comments. Individuals begin to abandon harmful employment at an alarming pace as time progresses.

7.7. Unhealthy Work Boundaries

Unhealthy work-life boundaries are frequently encouraged by toxic environments. They may contribute to employee burnout by encouraging them to prioritize work. Management may anticipate that staff will remain late, react to emails after hours, or complete work on weekends (McBeath et al., 2018). Toxic leaders usually set impossible deadlines and workloads, and which are providing inadequate support, and that can lead to stress, burnout, and a sense of being undervalued.

7.8. Gaslighting

In 2022, Merriam Webster designated gaslighting as its word of the year. The act of gaslighting another individual causes the individual to question their own senses (Techtargat, 2024). Examples of gaslighting include being excluded from meetings that are directly connected to one’s employment, hearing poor assessments of performance, and feeling belittled about feelings, and hearing gossip about oneself (Namie, 2017).

7.9 Lack of Career Support

Some employees believe that there is a lack of support available to assist them in developing their careers. These personnel have a sense of isolation from the team and lack mentorship. It is challenging to ascertain the subsequent actions to advance their professions due to this absence of advice. For entry-level employees, it may be more challenging to establish a connection with a team or boss as a result of the increasing number of employees who work electronically.

7.10. Low Morale and Negativity

Low employee morale may perpetuate negativity throughout the company and influence others. It is essential to promptly address any negative. In order to avert a vicious negative loop and foster a more productive workplace culture, management must address the underlying issue.

7.11. Sick Guilt

Sick guilt is the experience of shame that arises from the inability to perform at one's best while ill. Individuals who have sick guilt may refrain from taking any time off and may not even want to work from home, as they experience feelings of guilt when they do. In order to prevent this poisonous dynamic, employees must feel comfortable speaking up when they require a break, be aware of how to do it responsibly, and be forthright when they are unable to perform. It is imperative that organizations cultivate this climate (Liang, 2022).

7.12. People Don't Trust Each Other

The absence of trust among coworkers is apparent in a toxic work environment. Bohemond provides an illustration of an organization in which the management team's offices are situated adjacent to the desks of employees, so enabling them to observe the action on the floor. Alternatively, it may be a work atmosphere in which supervisors often contact their direct subordinates to inquire on their activities. Whitney Simon, a communications consultant and inclusion specialist, states that her impostor syndrome was exacerbated by being micromanaged as a Black woman, who is frequently the sole person of color on her teams (Melody, 2022). "Although this is no longer the case, there was a period when I had internalized the consequences of the lack of trust from my past bosses. I would convince myself that they would not have had to pursue me on duties if I was more capable," she explains. "However, I have come to understand that managers who are too prescriptive or who maintain a tight grip on their responsibilities create toxic teams that perform poorly."

8. Toxic Leadership Characteristics

A toxic leader is an individual who is accountable for a group or organization and who exacerbates the leader-follower connection by leaving the group in a worse state than it was before. Both good and bad leadership styles can spread within an

organization, so reporting toxic leadership upward may often yield little support from the hierarchy (Lai, 2022). It is well known that toxic individuals can seriously harm a business. Toxic leaders, in particular, can be especially damaging and are often hard to spot. Some toxic managers may initially boost sales and appear to increase profits, as this is their primary focus. However, these gains are usually temporary and can have serious repercussions on employees' morale, often leading to high turnover and discourage staffs who are less committed to their work. Therefore, leaders need to recognize poor management early to prevent significant damage of staff (López-Pérez et al., 2011). A deficiency of morality in leadership can propagate, resulting in leaders and team members engaging in harassment and bullying. This fosters a workplace environment that is unsafe and detrimental to both physical and emotional well-being mentally (NNTC, 2021). A good leader understands their core values and knows where to set boundaries. They respect their team and earn that respect in return. Respect fosters love and admiration, rather than fear, which is an effective way to lead and inspire. A leader serves as the foundation that maintains stability and cohesion within an organization. Their internal compass acts as a guiding principle, helping them stay on track during difficult times. If a leader recognizes these signs in themselves, it might be time for self-reflection (Baker, 2007). Remember, negative energy creates a toxic work environment, ultimately hindering employees from reaching their full potential and impairing team performance. Toxic leadership occurs when leaders, through destructive behaviour or dysfunctional traits, cause lasting harm to their followers, the organization, and outsiders alike (Maguire & Delahunt, 2017).

A poor work atmosphere is fostered by toxic leadership, a dysfunctional style that includes authoritarian and domineering managerial practices. As a result of this hostile attitude, businesses frequently encounter both immediate and long-term challenges. The most prevalent consequences include high turnover, employee fatigue, low productivity and creativity, team discontent, and workplace bullying. Due to their nervousness and need for control, these leaders frequently deploy micromanagement to erode the independence of authority and the self-esteem of their employees (Kilag & Sasan, 2023b). Rather than fostering a collaborative and constructive work atmosphere to demonstrate effective leadership, toxic CEOs cultivate an unfavorable business culture to impose their power and domination (Zaghmout, 2024). Prioritizing personal interests can lead to a rise in corruption, as evidenced by the recent crisis posed by Volkswagen emissions. These leaders routinely reward incompetence, and they may even ignore immoral actions. The arrogance of these individuals is frequently linked to their biases and prejudices, which may be demonstrated via discriminatory attitudes such as racism and sexism discrimination (Ashforth, 1994). The following are some of the specific traits and a few symptoms of toxic leaders (Müller & Bostrom, 2016).

8.1. Arrogance

Toxic leaders often display arrogance and narcissism. They boast and believe they

are always right, intensifying their tendency to impose their views as absolute truth. Such leaders dismiss feedback, particularly from subordinates, showing little respect for their team and offering no support. They view employees as pawns subordinate to them and expect strict obedience quietly (Yudkowsky, 2008). Arrogance often masks a lack of genuine confidence, which can be misleading. Leaders who act as if they can handle everything while secretly unable to do so may cause those around them to withdraw. This tendency suppresses important issues, keeping them hidden beneath the surface (Karthikeyan, 2017). Toxic leaders tend to exhibit boastfulness and arrogance. They believe they are invariably correct and expect others to accept their assertions as absolute truth. They do not offer assistance to others and strongly dislike being corrected, particularly when the individual offering correction is a subordinate.

8.2. Self-Servitude

A toxic leader tends to be self-focused, frequently pressuring their team through exerting control. They manipulate situations to serve their own interests, leveraging their seniority or higher rank within the company. Often, they provide misleading guidance or advice simply to advance their personal goals (Haslam, 2004). A leadership style focused on serving rather than being served fosters harmony and boosts performance. When a leader effectively promotes a positive work environment, it cultivates a relationship built on trust, which in turn maximizes engagement and productivity created. A key trait of toxic leadership is a focus on personal progression and self-interest, often at the expense of the organization's goals or the well-being of employees (Krasikova et al., 2013).

8.3. Lack of Faith and Confidence

A manager or supervisor who micromanages every element of each project is likely to be the most despised by all individuals if they could reach a consensus on what they loathe the most. Having someone constantly stare over your shoulder and critique everything not only makes a leader uncomfortable, but it also produces a sense of dissatisfaction and incompetence (Rice & Cooper, 2010). Leaders that are toxic frequently exhibit a lack of confidence in the capabilities of their personnel. They limit the employee's capacity to be creative and adaptable by making judgments only based on what they observe. Such an attitude can impede the development of members as individuals and as a team (Peyton, 2003).

8.4. Incompetence

Employees tend to notice when their boss struggles to make good decisions, which can lead them to doubt authority. Toxic leaders often inflate their egos by criticizing others' work and making them feel inferior to their true worth (Pedaprolu, 2019). But beneath their facade, they are inept and might even find it difficult to accomplish the simplest tasks decisions (Rayner & Hoel, 1997). This leadership style leads to poor communication. If someone has weak decision-making and

communication skills, their leadership can easily fall apart. That's why such leaders often surround themselves with their own professional "YES" group. Such "yes" group usually reflects the leader's attitude and makes them less open to new ideas employees.

8.5. Unmotivated and Lacking Support

A leader's lack of support is another issue that discourages individuals. A manager who is apathetic not only impedes staff growth but also restricts their capacity to achieve the organization's objectives (Brynjolfsson et al., 2018). Bosses that exhibit this behavior usually emphasize their own promotion, struggle to acknowledge the contributions of others, and regularly claim credit for their own accomplishments. This behavior is the result of fear and ego. Furthermore, employees' excitement for the objective may be diminished by a lack of motivation, which can lead to project delays and, in the end, organizational setbacks (Kellerman, 2004).

8.6. Lack of Moral Compass

Leaders need a moral compass to guide them through uncertain times. They should be fair, compassionate, and empathetic, particularly during difficult periods. However, these values are often overshadowed by the pursuit of profit or other priorities, such as popularity-seeking (Lipman-Blumen, 2005a). Toxic leaders often lack a strong moral compass, representative a disregard for ethical principles and the comfort of others. This can manifest as exploitation, harassment, and a focus on personal gain at the expense of their team or organization. Their actions can create a dysfunctional and demoralizing and upsetting environment (James & LeBreton, 2010).

8.7. Autocratic

A toxic boss refuses to listen to opinions other than their own. They expect others to follow their every instruction without question or direction silently (Yudkowsky, 2008). A toxic boss frequently perceives themselves as the alpha or self-proclaimed monarch, and their conduct typically reflects this perspective (Creswell, 2012). Employees are seen as inferior creatures or minions whose primary objective is to execute the leader's directives. Toxic leadership often manifests in an autocratic style, where leaders apply extreme control and demand conformity without considering input from others. This can lead to an antagonistic work environment, decreased morale, confidence, and ultimately, negative impacts on organizational performance (Padilla et al., 2007).

8.8. Irritable

Not surprisingly, toxic leaders tend to be very irritable. They dislike being interrupted and are not open to ideas from others. They often despise questions and avoid them whenever they can (Bligh, 2011). As a result, organizations under toxic leaders often suffer from stagnation due to limited innovation and poor commu-

nication of ideas. Leaders need to acknowledge and understand employees' efforts, even when goals are not fully met. Employees need to feel safe to express their concerns without fear of retaliation (Hatmaker, 2017).

8.9. Maladjusted

A toxic boss's gruff and haughty appearance conceals a bad-tempered youngster who is apprehensive about change. They exhibit a high degree of rigidity and have difficulty in adjusting to novel circumstances (Carsten et al., 2010). The organization's most significant impediment to reform is certainly the toxic boss. Toxic leaders are often explained as maladjusted, showing dysfunctional behaviors and destructive characteristics that negatively impact individuals, teams, and organizations. They are characterized by a pattern of behaviors that prioritize their own needs and ambitions, often at the expense of those they lead, leading to significant damage and hurt. They engage in behaviors that are source of harm, like deception, threat, compulsion, and unfair penalty (Li et al., 2018).

8.10. Lack of Confidence

Although they carry themselves with great confidence, a toxic leader internally lacks self-assurance. As a result, they struggle to trust their team members, often avoiding or dismissing difficult problems instead of confronting them (Bolino et al., 2008). The stress and burnout connected with unrealistic expectations can disapprovingly impact productivity. Toxic leadership can aggravate existing mental health conditions or lead to new ones. Leaders should offer adequate support, training, and resources to help employees thrive and prosperity (Paterson et al., 2014).

8.11. Incompetent

Although a toxic leader may feel they are the finest, they are frequently inept and unable to make even the most fundamental judgments or complete basic duties. Criticizing others and undermining their value is the source of their sense of significance and usefulness (Bass & Milosevic, 2018). When goals appear unattainable, employees may lose inspiration and commitment. Employees should feel comfortable communicating their concerns about workload and deadlines to their leaders (Grijalva & Harms, 2014).

8.12. Hierarchical

Without a strict hierarchy, toxic leadership cannot survive. A toxic leader often feels the weight of corporate authority above them. They are adept at influencing team members by using hierarchy and authority (Bolino et al., 2016). Instead of a top-down approach, non-hierarchical leadership emphasizes shared responsibility, collective decision-making, and empowering individuals within a team or organization. This can lead to increased engagement, innovation, and a more dynamic and resilient structure (Greshko, 2018).

8.13. Unrealistic Expectations

Leaders who are toxic are usually notorious for establishing objectives that are both unrealistic and unjust. Demoralization ensues when team members determine that these objectives are unattainable. As the workload increases, the firm gets increasingly stressed (Barsness et al., 2005). Toxic leaders often create a negative and harmful work atmosphere by setting unrealistic expectations for their teams. These expectations can patent as consistently high workloads, unachievable goals, and a lack of deliberation for employees' capabilities, leading to burnout, decreased morale, and high turnover rates (Griffin & O'Leary-Kelly, 2004).

8.14. Symbols of Personal Authority

These emblems encompass the right to utilize communal parking spots, full access to all places, and maybe the decoration of the entire office with their images and stories of successes (Braun et al., 2015). They may compel deadlines that are impractical and create a steady state of pressure and stress. Employees may experience physical and emotional tiredness due to the inexorable pressure. Employees may look for new opportunities where they feel more valued and supported (Hannah et al., 2013).

8.15. Discriminatory

It is unsurprising that toxic leaders typically demonstrate discriminatory conduct. Their preconceptions and prejudices frequently appear as sexism, racism, ageism, or other types of discriminatory conduct (Yscouts, 2025). Toxic leaders frequently display a range of destructive behaviors, and setting impractical hope is a key characteristic. They may disregard the team's capabilities and resources, leading to a sense of frustration, irritation, and failure (Harris et al., 2007).

8.16. Lack of Empathy

A negative and hostile work atmosphere is produced when leaders fail to exhibit empathy for their team members. A lack of empathy can manifest in several ways, such as disregarding employees' concerns or disregarding their personal life outside of work. Toxic leaders frequently prioritize their objectives over the welfare of their team, which can result in increased stress, dissatisfaction, and burnout (Bligh, 2011). Leaders must cultivate and implement empathy in order to combat toxic leadership. Leaders may establish a productive and healthy work atmosphere by comprehending and appreciating the emotions and experiences of their team members.

8.17. Excessive Micromanagement

Leaders who consistently monitor and regulate every area of a team's work can stifle innovation, restrict freedom, and erode morale and trust (Optimumjoy, 2024). Micromanagers frequently engage in second-guessing their team members, which leads to a deficiency of motivation and confidence. They may micromanage

their employees, continually scrutinizing their work and hindering their independence. They may fail to provide sufficient support, resources, or training to help employees meet the demands positioned upon them (Osborn et al., 2014).

9. Problem of Toxic Leadership

This poisonous conduct not only impedes individual development but also impedes the team's capacity to collaborate and create. Leaders must cultivate an environment of delegation and trust in order to combat toxic leadership. The unfortunate fact of the workplace is that there are bad employers. This issue can only be accurately evaluated by individuals who have encountered such leaders. Nevertheless, this piece might serve as an illustration of such leadership. It appears that toxic leaders are exceedingly prevalent in businesses of all sizes (Kurzweil, 2005). Additionally, there is some information that elucidates the reason for this. Recently, researchers at Ohio State University conducted an experiment in which they assigned leaderless groups to collaborate on a shared goal. They discovered a concerning tendency when they saw the groups' interact. The majority of organizations opted for members who were overconfident and self-centered to assume leadership positions. Groups frequently mistake overconfidence for leadership skill in the absence of any evidence of competence. Such confidence is especially prevalent among toxic narcissists. Higher productivity and a healthier work environment are the outcomes of granting employees' autonomy and allowing them to take responsibility for their jobs.

9.1. Defensiveness and Ego Centricity

Leaders cultivate a culture of fear and silence by refusing to acknowledge mistakes or accept feedback when they get defensive. Ego-driven CEOs often prioritize their interests over the team's collective achievement, resulting in inadequate collaboration and stifled creativity (Spence, 2025). This detrimental conduct undermines morale and undermines trust within the organization. In order to mitigate toxic leadership, leaders should prioritize humility and self-awareness. Leaders may establish a work climate that is supportive and growth-oriented by accepting criticism, acknowledging faults, and putting the team's needs over their own.

9.2. Inconsistent Communication

A lack of clear and consistent communication by leaders results in confusion and misalignment across the organization team (Shelton, 2022). Rumors, distrust, and diminished productivity may result from this absence of openness. In the event of uneven communication, team members are unable to comprehend their duties or expectations and remain unaware. Toxic leaders may suppress facts, report selectively, or alter their viewpoints without notification or justification (Lubit, 2004). Leaders should prioritize transparent and forthright communication in order to combat toxic leadership. Consistent updates, clear objectives, and an open-door policy may foster trust, collaboration, and a healthy work atmosphere.

9.3. Favoritism and Unfair Treatment

A contentious and toxic work environment is cultivated by leaders who exhibit favoritism toward particular persons or groups. Decreased morale and fragmented team cohesion are the consequences of such behavior, which undermines objectivity, equality, and justice (Schatsky et al., 2014). Resentment and decreased engagement are the results of select employees being consistently favored while others are neglected or abused. Leaders must prioritize equity and impartiality in order to mitigate toxic leadership. They are required to offer equitable resources, recognition, and opportunities to everybody. A pleasant, inclusive work environment that fosters development, cohesiveness, and productivity may be established by leaders who consistently treat all individuals equally and without bias.

9.4. High Employee Turnover Rate

Employees are inclined to experience feelings of dissatisfaction, frustration, and disengagement when leaders establish a toxic work environment. The high turnover rate is a direct consequence of the toxic culture, which attracts talented employees to pursue job opportunities elsewhere. This volatility undermines the organization's productivity and general stability (Tesla, 2025). Toxic executives sometimes disregard their role in staff turnover or view it as inconsequential. Leaders should prioritize the promotion of employees' happiness, career advancement, and well-being in order to mitigate toxic leadership. Creating a friendly and enjoyable work environment is beneficial for retaining talented employees and reducing turnover.

9.5. Resistance to Change

Growth, innovation, and flexibility are impeded when leaders resist or block fundamental organizational changes. Toxic leaders often cling to outdated methodologies because they fear change may erode their authority or dominance. This opposition leads to a work atmosphere that is both sluggish and antiquated (Weforum, 2021). Progress may be impeded, innovation can be restricted, and employees who are hungry for positive change might be frustrated by toxic leadership. In order to address this issue, leaders should foster a culture of continual improvement and welcome change. Leaders may cultivate creativity, enhance productivity, and establish a good, forward-thinking work atmosphere by promoting adaptation and flexibility.

9.6. Lack of Vision or Clear Direction

Staff members become perplexed and apprehensive when leaders fail to communicate the organization's goals and objectives effectively. This results in employees feeling lost and disengaged, as they struggle to understand the purpose and direction of their job. Toxic leaders often overlook the importance of strategic planning and long-term vision, instead prioritizing short-term gains or personal interests. Leaders must establish and effectively communicate a clear vision to

their team to combat toxic leadership. Ultimately, organizational success may be facilitated by the provision of a sense of purpose and strategic direction, which can encourage people, establish alignment, and assist in the attainment of shared objectives.

9.7. Not Leading by Example

Leaders' credibility is undermined, and their team members' confidence is diminished when they fail to implement their policies. Toxic leaders frequently establish unreasonable demands for their staff and exhibit a lack of professionalism, responsibility, or honesty (Indeed, 2025). This dishonest behavior cultivates a sense of animosity, disdain, and diminished motivation among team members. In order to fight toxic leadership, leaders must demonstrate the attributes they wish to see. Leaders may foster a healthy work atmosphere, promote passion and commitment from employees, and build trust by demonstrating the values, attitudes, and work ethic they demand from their team.

9.8. Suppressing Feedback and Avoiding Accountability

When leaders dismiss or discourage constructive feedback from team members, it hampers growth, creativity, and innovation in collaboration (Bessen, 2015). Overall success is enhanced by cultivating a good work atmosphere. The firm is more likely to experience growth when employees are more productive and inventive, and they are more inclined to share ideas. In contrast, a toxic work environment can result in severe issues that could potentially result in the demise of a firm. It is crucial to acknowledge that it might be challenging to perceive the broader context in one's everyday activities. Similarly, leaders may overlook indicators of potential problems. Some indications that leaders should be aware of in order to cultivate and preserve a healthy workplace are identified by members of the Forbes Business Council. Modern executives can learn valuable lessons from these experiences, helping them prevent the dynamics of toxic workplaces and stay vigilant.

9.9. Poor Communication

A poisonous atmosphere is typically the consequence of inadequate communication between management and staff. Leaders generally conduct quarterly meetings during which all individuals have the opportunity to express their ideas or apprehensions regarding the current state of affairs (Hair et al., 1998). It was a real success, despite the fact that it required some time to establish and develop confidence. However, the lack of effective communication between leader and employees can lead to major frustration; poor communication is rarely deliberate. In most cases, breakdowns in communication can be traced back to poor communication skills or just not having the right communication tools.

9.10. Fear of Speaking Up

Toxic leaders usually try to control every aspect of their team's work. They try

to micromanage tasks, leaving little room for employees to take initiative or make decisions. This can lead to a stifling environment where creativity and innovation are suppressed. And it creates fear. Fear of speaking up and fear of recrimination indicate a toxic environment. Leaders should remember that they are not perfect and that problems are common. The sooner they identify issues, the better they can prevent toxicity. Additionally, leaders should seek specific feedback.

9.11. Selfish Goals

The initial step for leaders is to assess their present surroundings. The primary distinction between a boss and a leader is that a poisonous workplace is typically the result of or perpetuated by management. A suitable beginning point for change symptoms is when management's priorities are selfish, with limited concern for the team's mental well-being and motivation (Rosenthal & Pittinsky, 2006). Toxic leaders are usually reluctant to accept feedback or criticism, additionally they highlight their lack of self-awareness and refusal to change. A toxic leader might prioritize their own career progression over the comfort of their team, and ultimately potentially leading to burnout and high turnover rates within the department (Lipman-Blumen, 2005b).

9.12. Mental Health Decline

A decrease in the mental well-being of their team is one indicator that leaders should monitor. A recent poll conducted at a business organization revealed that more than 50% of employees reported a shift in their job emphasis during the past year (Sarwar et al., 2021a). Additionally, the poll demonstrated that several employees worldwide are currently placing their mental health above other elements of their lives. Consequently, leaders must take into account the introduction of new initiatives and programs that are designed to promote the mental health of their personnel (Manaka et al., 2023).

9.13. Disengagement

Disengagement is the act or process of ceasing to participate in a particular activity, circumstance, or organization. A decrease in motivation or passion for job obligations sometimes indicates an underlying issue that might impact workflow and overall team productivity. Acknowledge the poison and confront it directly (Apthorpe et al., 2019). Toxic leadership notably contributes to employee disconnection. Studies indicate that toxic behaviors from leaders can lead to increased turnover, dissatisfaction, and a lack of commitment, ultimately impacting organizational performance (Pratt, 2009).

9.14. High Turnover Rate

It is a critical indicator of a toxic work environment that management should be aware of. Frequent departures may indicate inadequate support, bad manage-

ment, or a hostile workplace. Toxic leaders create a climate of fear and mistrust, where employees hesitate to voice concerns or offer suggestions, hindering collaboration and innovation. The negative work environment created by toxic leaders can drive employees to seek other opportunities, increasing turnover and absenteeism (Pelletier, 2012). In order to solve this, leaders should prioritize open communication, offer anonymous feedback alternatives, and actively pursue the identification and resolution of the root causes (Forbes, 2024a).

9.15. Constant Team Conflict

Ongoing disagreement among team members is a strong sign that a workplace is poisonous. This type of conflict arises when employees are unable to convey their issues transparently and candidly. However, this hidden animosity frequently persists, leading to passive-aggressive acts. Over time, these processes establish the optimal circumstances for the development of toxicity (Pham, 2025). Toxic leaders often create a climate of conflict within their teams due to their unconstructive behaviors and dysfunctional management styles. This can manifest as increased struggle, fear of retaliation, and a lack of trust and cohesion, eventually hindering productivity and team performance. They often ditch team members against each other, creating an aggressive environment where teamwork is replaced by enmity and disbelief (Schyns & Schilling, 2013).

9.16. Hyper-Competitiveness

Hyper-competition in a work environment can be defined as an environment where employees are constantly pressured to outperform each other, often to the detriment of collaboration and teamwork (Sandberg & Tsoukas, 2011). The presence of excessive competition in the workplace is indicative of a toxic atmosphere, since it frequently demonstrates a lack of collaboration and friction among employees. Leadership may not be properly cultivating a collaborative and cohesive work atmosphere when workers perceive themselves as always competing (Castellanos, 2018). Toxic leadership and hyper-competitiveness are entangled traits that can cruelly damage teams and organizations. Toxic leaders frequently foster a ruthless environment where employees are ruttled against each other, and success is prioritized over well-being. This can lead to a reject in morale, productivity, and trust among team members.

9.17. Lack of Collaboration and Communication

Poor teamwork and restricted open communication are indicators of a toxic work environment. Employees tend to become disengaged and reluctant to express their thoughts or take risks when they perceive that sharing their ideas or worries may put them at risk. In order to resolve this issue, executives should monitor symptoms of low morale and decreased productivity that are the result of fear-driven decision-making and closed mindsets (Forbes, 2024b).

9.18. Chronic Complainers

Leaders should monitor employees who habitually complain, as they can negatively impact the organization by spreading negativity, reducing morale, and decreasing productivity. These employees contribute to a toxic work environment, harm the company's reputation, and hinder progress by dismissing solutions to contributions (Hansonrobotics, 2023).

9.19. Quiet Quitting

Leaders must acknowledge that a toxic work environment is often marked by silent resignations. This conduct results in employees performing only the minimum amount of labor, disengaging with the company's principles, withholding their opinions, and lacking enthusiasm for their job. When individuals cease to demonstrate initiative, give ideas, or strive for greatness, it suggests that the team's culture is toxic and detrimental (Buddytherobot, 2023).

9.20. Low Morale

Leaders need to monitor employees' morale closely as an indicator of a toxic work environment. Ignoring low morale can result in decreased productivity, talent loss, and further decline in team spirit. Leaders need to promote open communication and involve employees in identifying and addressing underlying issues. Investing in a healthy workplace culture ultimately fosters long-term success and boosts employee satisfaction with well-being (Itchronicles, 2023).

9.21. Lack of Zeal

A toxic work environment is frequently indicated by a lack of excitement among employees. This circumstance occurs when employees perceive themselves as wandering without a clear plan or defined direction. When people are uncertain about what to achieve or understand that their objectives will not be realized, their enthusiasm for their job decreases, and they are more inclined to seek better chances elsewhere (Reid & Maroulis, 2017).

9.22. No Desire to Take Risks

When there is inadequate incentive to undertake measured risks, a poisonous culture may emerge. This is typically the case when the founder retires or when corporate bullies are not penalized. It is essential to recognize and encourage risk-taking, regardless of the outcome. The use of 360-degree evaluation procedure guarantees that all workers' perspectives are taken into account and that bullying is addressed (Korinek & Stiglitz, 2019).

9.23. Contempt

Contempt in leadership, characterized by disdain and disrespect, and that can wear away trust, confidence, damage morale, and ultimately deter team output.

Contempt creates a toxic environment; as a result trust and open communication become impossible. When leaders show disdain, it can dishearten team members and lead to decreased efficiency, output, and commitment (Luger George, 2009). Treating a subordinate or colleague with contempt goes beyond just criticizing them for not following rules. One indicator of contempt is the balance between reprimands and praise. If interactions primarily involve reprimands, it suggests a problem with wrong (Schindler et al., 2021).

9.24. Gossip

Gossip in the break room may be particularly poisonous, frequently originating from an individual's dissatisfaction with a team member. They prefer to avoid confrontation by whispering behind their backs, rather than immediately confronting the matter (Abe & Nakamatsu, 2009). Gossip erodes associations, breeds negativity, and hampers productivity and innovation. Leaders should prioritize open communication, transparency, and professionalism to foster a healthy, friendly, and considerate workplace. When leaders gossip, they lose the faith of their team members, who may then question the leader's honesty and judgment (Vrchota et al., 2019). A culture of gossip can lower morale and generate a negative and scratchy work environment.

9.25. No Workplace Boundaries

Toxic workplaces often accept and even encourage ignoring healthy boundaries. Whether in-office or remote, the common outcome is a tendency to prioritize work above all else (Yukl, 2010). Be alert for Friday afternoon emails that include tasks with Monday deadlines, for example. Training managers at all levels on this is essential to prevent ongoing issues of toxicity (Vrchota, 2019). Modern leaders need to place and preserve healthy workplace boundaries, not avoid them completely. Clear boundaries are necessary for effective and successful leadership, team well-being, and productivity. Contradictory or absent boundaries can direct to mystification, anger, and a perception of nepotism (Yahya et al., 2010).

10. Prevention and Reduction of Toxicity in the Workplace

Both the business and its people may be adversely affected by toxic work environments. Workers in these circumstances are more likely to resign or take time off, and they may also feel stress, despair, and anxiety. In addition, productivity typically declines in hazardous environments. Terry Doherty, the founder and CEO of Doherty Associates, observed that the challenges several financial services organizations face in implementing and maintaining hybrid work models are underscored by recent research and conclusions (Yammarino, 2013). He stated, "Doherty Associates' research shows an underappreciated fact." We discovered that just 15% of the 499 UK capital markets professionals surveyed believed that

the introduction of new technology to allow hybrid work had increased productivity, even though 78% had done so. Additionally, 25% of respondents reported feeling overwhelmed by the abundance of resources, while 37% encountered difficulty in locating essential job-related information. The anticipated productivity enhancements of remote work are at risk of being undermined by these considerations. Doherty emphasized that the advantages of hybrid working are contingent upon the availability of sufficient IT assistance. Employers may select cost-effective solutions to enhance engagement and productivity in hybrid environments and minimize the loss of valued personnel, even when they are operating on a limited budget. The Great Resignation was significantly influenced by toxic culture (Hetler, 2023), when millions of people resigned from their positions in search of a more favorable work-life balance. Additionally, organizations with toxic work environments may encounter difficulties in recruiting and retaining new employees. Managers may use some measures to mitigate and avoid workplace toxicity (Quicke, 2023). By implementing a few strategies, organizations can foster a healthier, more productive, and more successful workplace while reducing toxicity. Examples include the following.

10.1. Putting Employees First

Its employees maintain a company's operations. Recognize the needs of employees and foster open dialogue. Recognize obstacles and include staff in talks to address them. Organizations should create team-building opportunities and cultivate a collaborative environment. When team members see their leader actively embodying the desired behaviors, they are more likely to be inspired and motivated to do the same. Modern leaders should recognize employees' achievements promptly and be clear about what behavior or contribution is being accepted and well valued (Samuel & Mokoaleli, 2017).

10.2. Prioritizing Well-Being

Besides focusing on work responsibilities, emphasize employee well-being by establishing a feedback system to detect toxic team members, including leaders. This involves using an anonymous survey to collect employees' opinions on the organization and its culture, ensuring they feel comfortable sharing their thoughts openly (Sarwar et al., 2021b). When employees feel valued and their contributions are acknowledged, they are more likely to be motivated and engaged in their work.

10.3. Model Expectations

Leaders must regularly demonstrate the required conduct. They should be provided with training on the identification and prevention of hazardous workplace cultures. When leaders lead by example, they earn the trust and respect of their team members. This is because they are demonstrating that they are committed to the same standards and goals as everyone else (Gioia et al., 2013).

10.4. Reward and Recognition

Efficient recognition and rewards can enhance morale, motivation, and performance while also humanizing a culture of admiration and feedback. Even a simple “thank you” may be used to express gratitude regularly. Management can instill a sense of accomplishment and worth in the team by acknowledging their accomplishments. To enable employees to express gratitude to their peers for their contributions, establish a peer recognition program (HWB, 2003).

10.5. Hiring the Right People and Training

A skill that cannot be taught is attitude. Although individuals are capable of acquiring job-related skills, the elimination of poisonous habits is a difficult task. In order to cultivate a healthy work atmosphere, prioritize individuals that are team-oriented and optimistic during the hiring process at all levels (Borowiec et al., 2016). Organizations must offer practical and appropriate training on dispute resolution, good communication, and workplace conduct.

10.6. Survey and Feedback

Organizations should conduct regular surveys and feedback sessions to identify potential issues and areas for improvement. They need to prioritize mental and physical health by offering appropriate resources and support. Additionally, a secure platform should be available for reporting, investigations, and data management analysis. A culture of appreciation and recognition can lead to increased employee faithfulness and reduce turnover (Bowling et al., 2015).

10.7. Discipline and Meditation

Discipline helps leaders stay focused, manage time effectively, and make consistent progress towards their goals, while meditation enhances self-awareness, emotional regulation, and decision-making under pressure. On the other hand, Meditation helps leaders become more aware of their thoughts, emotions, and reactions, enabling them to better understand themselves and their impact on others (Moreno Millán et al., 2011). The organization needs to establish a clear disciplinary process for handling repeated toxic behaviors. They should use mediation services to resolve conflicts and enhance communication among employees. Additionally, the organization should offer constructive feedback and support to help individuals improve. By practicing mindfulness, leaders can learn to manage their emotions more efficiently, mainly in traumatic situations, and act spontaneously (Chalmers, 2016).

10.8. Leading by Example

In every organization leaders should exemplify positive behaviors like respect, empathy, and giving constructive feedback. They must promote open dialogue, active listening, and feedback sessions to foster trust and transparency. Additionally, organizations need to create a clear conflict resolution process and offer training in

conflict management skills. This involves actively exemplifying the qualities and actions that the leaders expect from their team, fostering trust, respect, inspiration, and motivation within the group or organization. Leaders who lead by example constantly exhibit the behaviors they want to see in their team members (Reedy, 2017). This could include things like hard work, dedication, belonging, integrity, innovation, and a positive attitude.

10.9. Clear Policies and Clear Expectations

Organizations should clearly define their values and ensure leaders exemplify them consistently. They must create confidential and accessible channels for reporting misconduct or concerns without fear of retaliation. It is important to ensure job descriptions are accurate and aligned with actual responsibilities, with regular discussions about expectations with employees (Coe & Enomoto, 2022). Additionally, organizations should promote employees' work-life balance by encouraging them to disconnect after work hours and prioritize their well-being.

11. Practicing to Avoid Toxic Leadership

Organizations should focus on fostering a positive work environment that emphasizes respect, empathy, and transparent communication. Promoting teamwork, celebrating achievements, and offering growth opportunities can significantly help reduce toxicity. Clear policies on harassment, bullying, and acceptable behavior must be communicated clearly to all staff, including consequences for violations, to ensure a safe and protected workplace. Establishing confidential channels for employees to report toxic behavior is essential. Furthermore, offering counseling services and support networks can assist employees in managing the emotional impact of a toxic work environment (Omohundro, 2008). Toxic environments typically arise from poor leadership. In all organization, goals should be clear and well circulated as clear goals provide a baseline against which to measure progress and evaluate success. This also allows contemporary leaders to identify areas where the team is excelling and areas that may require further attention. Moreover, contemporary leaders should also allow for flexibility and adaptation as needed. Sharing goals helps the team understand the rationale behind any changes and adapt their approach accordingly (Roberts, 2016). Providing leadership development programs can help managers acquire the necessary skills and knowledge to foster a positive work atmosphere. Good leaders should set an example, ensure fairness, and encourage respect and teamwork. Regularly collecting employees' feedback via surveys or anonymous suggestion boxes can reveal hidden problems and highlight areas for improvement. This allows organizations to address toxic behaviors quickly (Eisenhardt & Graebner, 2007). To prevent toxic environments, organizations and leaders can follow a few straightforward tips outlined below.

11.1. Leaders Should be Transparent and Open

A leader should be transparent in their communication on the business, the team, and their own problems. Clearly articulate the value they feel they can provide to the firm, while also seeking feedback on other critical areas that may have been ignored. This encourages meaningful talks, allowing leaders to improve both personally and professionally while establishing a lucrative company organization (Harris et al., 2018). Transparent means honest and open with employees about the organization's vision, goals, performance, and decision-making processes. It also involves creating channels for open communication, connection, and regular feedback. Transparency fosters faith between leaders and their teams (Kurzweil, 2005). When leaders are open, transparent, and honest, then employees are more likely to feel confident and positive in their leadership and the organization's direction.

11.2. Leaders Should Share Organizational Goals

Clear goals usually provide a combined course for the team, and that ensuring everyone is working towards the same objectives. Explicitly sharing goals enhances communication and facilitates collaboration within the team. When everyone is aware of the objectives, it becomes easier to coordinate efforts, share ideas, and work together effectively (Chapman, 2019). A one-year plan that is detailed and prioritizes objectives serves as an indispensable guide. Ensure that these objectives are well-defined and that new employees are fully aware of them and are dedicated to working diligently to assist the organization in achieving them (Hossain, 2025a). However, by clearly articulating the company's mission, vision, and values, contemporary leaders may provide a structure for individual and team goals, and can ensure everyone understands how their work contributes to the bigger organizational objectives.

11.3. Leaders Should Commit to Consistent Engagement

A business board offers firms the opportunity to engage with individuals who possess a diverse array of ideas and experiences. Recruiting and onboarding a new board member necessitates meticulous planning and consideration of the requirements of all parties, regardless of whether a firm has an established board or is establishing one for the first time. Neglecting continuous involvement is a prevalent error during on-boarding. Failure to maintain consistent communication beyond the initial onboarding process may lead to limited contributions and disconnections. It is important to establish channels for frequent information, provide opportunities for inquiries and concerns, and engage members in pertinent debates. This method guarantees that their knowledge remains consistent with the organization's evolving objectives and requirements (Marwala & Hurwitz, 2017). Mentorship programs ought to be implemented by leaders. Assign the new board member to an experienced member to provide mentoring. This facilitates a seamless on-boarding process, fosters an awareness of board

dynamics, and fosters the development of relationships, hence enabling the newcomer to soon become an active contributing member (Yuskovych-Zhukovska et al., 2022).

11.4. Providing Accurate and Complete Information

For effective input, it is imperative that business owners and CEOs guarantee that all board members receive accurate and thorough information. Equally critical is the comprehensive comprehension of this material by board members, and leaders should confirm that they comprehend it. It is essential to organize a comprehensive orientation session that thoroughly examines the company's strategic plan, finances, culture, and primary difficulties. In addition, the integration and comprehension of a new member can be improved by assigning a seasoned board mentor to them (Olick, 2022).

11.5. Maintaining and Ensuring Organizational Values

Business leaders play a crucial role in transforming abstract values into tangible actions that underpin the organization's core beliefs. The organization is distinguished in the marketplace, brand loyalty is enhanced, and trust is fostered when team members constantly exhibit these principles. One of the most effective ways to promote and reinforce these principles, both internally and internationally, is to lead by example. The recognition and appreciation of team members who exemplify these qualities contribute to the strengthening of commitment. Furthermore, it is important to engage in consistent dialogues on these principles in both official and informal contexts to underscore their significance and embody them (Quan-Haase, 2020). Leadership is the foundation for the consistent modeling of business values. It is important to include these ideals throughout all training sessions and communications. By consistently emphasizing and compensating employees who exhibit these values throughout customer contacts, their importance are reinforced, so facilitating their automaticity for the whole team (Forbes, 2025). The mission and the products that leaders deliver must be tightly aligned with their fundamental principles.

11.6. Integrating Performance Reviews

One method is to integrate the company's values into incentive programs and performance appraisals. Employees are far more inclined to behave accordingly when they see that their evaluations and promotions are contingent upon their embodiment of these principles. Acknowledging people who exhibit these qualities with clients in public provides a clear baseline and encourages others to follow suit. Please bear in mind that the act of modeling business values extends beyond mere compliance with regulations; it is a reflection of the organization's broader culture. In order to cultivate a pleasant work environment, it is necessary to celebrate these values and reinforce them via open communication, employees' appreciation, and ongoing training development (Richtel, 2010).

11.7. Giving Their Team Freedom

The judgment of their team should be trusted by leaders, who should also allow their genuine selves to show. It entails allowing team members to discuss their views naturally and freely. Genuine and unfiltered conversations are the result of the absence of scripts or rehearsed lines (Chen et al., 2022). It is insufficient to only provide a picture to the external world or clients; the image must also correctly represent the actual work environment, professionalism, and good mood within the workplace (Matz et al., 2017). Leader should promote a sense of shared purpose and encourage collaboration to build trust and respect among team members.

11.8. Being a Reference for Their Team

Leaders must acknowledge the significance of continually showing corporate principles and establishing a positive example in all interactions. They establish a benchmark for their teams, providing a practical reference for interacting with clients and consumers in harmony with these principles through exemplary actions and attitudes (Galego Hernandez et al., 2021). Companies are increasingly using daily or regular activities to promote cultural values. This involves setting aside time for staff to share examples of how they have applied these principles in service to consumers (Sczesny & Kuhnen, 2004).

11.9. Prioritizing Recognition and Flexibility

Leaders must recognize and incentivize team members who regularly exhibit the company's values throughout customer interactions. Simultaneously, they should ensure that individuals are held accountable when their conduct deviates from these principles. This fosters a culture that is founded on trust and integrity (Schaubroeck et al., 2012). Leading a team is more than only articulating values; it necessitates embodying them. The essential concepts of the firm heartbeat are established when these values are regularly displayed via actions, rather than as just words (Martins & Ning, 2021). Leaders should create a culture where employees feel comfortable sharing their thoughts, concerns, and feedback without fear of vengeance.

11.10. Demonstrating Organization Values in Daily Work

In order to ensure that the team embodies the company's key values in their interactions, leaders should consistently emphasize them. It is also advantageous to reiterate these principles during company-wide meetings and events. Furthermore, it is essential to acknowledge those who effectively embody these principles (Poole & Mackworth, 2017). Consistent company values may be promoted in customer interactions by business executives who lead by example. Their behaviors serve as a benchmark for the team when they exhibit these principles. This demonstrates the actual application of the company's ideals, which in turn motivates team members to emulate them. Furthermore, it contributes to the cultivation of

an environment that.

11.11. Implementing Accountability Mechanisms

Leaders should be accountable for their actions and decisions through regular performance reviews, feedback mechanisms, and consequences for unethical behavior. Organization should invest in leadership development programs that focus on emotional intelligence, conflict resolution, and ethical decision-making. Leaders should be trained to understand and manage their own emotions and the emotions of others, fostering empathy and effective communication (Fraher, 2016). Frequently assess leadership styles, provide constructive feedback, and address issues proactively to prevent the development of toxic behaviors.

11.12. Cultivating a Positive Culture

Leaders need to focus on building a positive and inclusive work environment that values respect, trust, and collaboration. They should not ignore or tolerate toxic behaviors, address them promptly and constructively, either through coaching, mentorship, or, if necessary, disciplinary action. In this era encouragement is essential for leaders to reflect on their own leadership styles and identify areas where they can improve (Fairhurst & Uhl-Bien, 2012). They need external coaches or consultants to provide support and guidance to leaders who may be struggling with toxic behaviors. Organization need to keep records of instances of toxic behavior, including dates, times, and specific actions, to support any necessary interventions or investigations (Ferris et al., 2007).

12. Leadership Challenges in the 21st Century

The 21st century has been characterized by continuous upheaval, continual change, and fast technological advancement. Throughout this period, the globe has reached accomplishments that are unparalleled in history, significantly influencing the way in which individuals work and live. The dotcom boom, technical advances, the advent of the smartphone, the emergence of digital platforms, social media, IoT, 5G/6G, AI, robots, machine learning, and blockchain have all transpired rapidly. These changes have significantly impacted organizational operations and global business practices. The proliferation and democratization of information have been significant outcomes. This flow of information has facilitated a more seamless and efficient global economy, in conjunction with the rapid speed of technology-driven globalization. Furthermore, the global economy's power landscape has been significantly altered by the fast expansion of developing economies such as China, India, Brazil, Indonesia, and Middle Eastern countries (Kilag & Sasan, 2023a). All of these shifts have significantly impacted the function of leadership in contemporary companies. Modern executives are confronted with the challenging task of guiding their firms through a global economy that is both intricate and constantly evolving. These strategic factors have an impact on not just whole nations, but also industries, marketplaces, sectors, and individual goods

and brands. In order to effectively lead in this period, it is necessary to have a proactive approach to the management of change and its impact on the long-term performance of a company (Martinroll, 2019).

Kodak is a classic example of a firm that was pushed to depart the market due to its leadership's failure to adapt to the rising competition and change. Kodak, which was once the world's largest film manufacturer, was hesitant to fully embrace the digital shift because it was concerned that it would undermine its core film business. This hesitancy led to the company's downfall, since the need for film printing declined considerably during and after the digital revolution, requiring Kodak to exit from several product categories. In the same spirit, Nokia, Blockbuster, and Pets.com were all doomed as a result of their ongoing dependence on obsolete products in the face of market growth. Several such examples will probably. Our strategic approach and thought habits have been significantly influenced by the aforementioned company change. In these uncertain times, leadership becomes even more crucial. The subsequent section delves into the key challenges that 21st century leaders will face. Leadership is the process of encouraging individuals to do tasks or achieve goals that they may not be able to complete without the necessary motivation or skills. The criteria for individual fulfillment, goals, and expectations have undergone a significant transformation in recent years (Avolio, 2006). The aforementioned business transformation has had a substantial impact on our strategic approach and thought habits. Leadership becomes even more essential during these uncertain times. The following is a discussion of the primary obstacles that 21st century leaders encounter.

12.1. Geopolitical Volatility

Geopolitical variables have the potential to have a quick and disastrous effect on organizations. Unstable geopolitical circumstances may discourage investments and exhaust financial resources. High volatility may also lead to more stringent government restrictions, which might elevate the expenses of conducting business in the impacted countries (Mujtaba, 2022). Given that these risks frequently exist outside of an organization's control, including government acts, laws, environmental challenges, trade policies, and labor markets, they provide an increasing challenge for leadership teams, among other things.

12.2. Technological Disruptions

The 21st century has been characterized by fast technological disruption, with futurists and trend analysts claiming that such upheaval is now the standard. This disruption has had an impact on businesses in a variety of sectors and industries, including healthcare, manufacturing, and computing. Cloud computing and artificial intelligence have extended data-driven decision-making, while 3D printing is employed to make building materials, consumer items, complete houses, and artificial organs. Data mining businesses are developing DNA databases to facili-

tate personal identification. These are only a few instances of the ways in which technology has transformed the landscape in the 21st century. Parallel to these technical advancements, there has been a significant increase in the number of startups and entrepreneurship. Startups are capable of revolutionizing company paradigms by using novel approaches to product development and sales, as they are both adaptable and inventive (Mayo Clinic, 2021). These advancements have a substantial impact on the commercial and operational models of organizations, as well as the manner in which customers are supplied in the current and future markets.

12.3. Economic and Political Uncertainty

Organizations must confront economic and political uncertainties after evaluating geopolitical risks at the country level. Companies prioritize stable environments, regardless of their size, as frequent labor strikes, societal unrest, and instability may significantly affect revenues, earnings, and investments. In the 21st century, the management of these uncertainties has emerged as a critical leadership task (Volery & Pullich, 2010). To develop an effective growth plan, it is imperative to consider economic and political risks, as enterprises strive for quicker expansion and startups want rapid scaling.

12.4. Shifting Demographics

The emergence of dual-income and single-parent families, an older population necessitating bigger health and social services, and a wider variety of labor are all contributing to the enormous transformation of society that is being driven by global demographic upheavals. These changes result in oscillations in the demand for a company's products and services, which generates persistent demands to maintain the relevance of the company's offers (Coe et al., 2021). Organizational leaders are confronted with the issue of maintaining profitability by effectively projecting these demographic patterns and adjusting their plans appropriately.

13. Modern Leadership Strategies

In the 21st century, these issues necessitate that next-generation leaders adopt a distinct approach to the management and expansion of their enterprises. The future of work will confront new difficulties that current and prior leaders have not addressed, despite the fact that leadership has always been hard. Leaders will face tremendous challenges in the coming decade. It is impossible for them to rely exclusively on conventional tactics; rather, they must visualize the future and direct their organizations appropriately. Nevertheless, this is not an easy task. The rapid emergence of technical breakthroughs is a common occurrence, and it appears that once a new technology is comprehended, it becomes obsolete as a superior alternative emerges. In order to identify the most critical breakthroughs and the most promising improvements in the pipeline, leaders must maintain a vigilant approach to technology and consistently adjust their perspective (Yeramyan,

2014). In the development of their leadership strategies for modern leaders in the 21st century, boardrooms should examine the following implications:

13.1. Having a Balanced Short-Term and Long-Term Lens

Organizations constantly face pressure to deliver short-term wins while also pursuing long-term strategies. Reports on quarterly earnings to satisfy shareholders and analysts often emphasize short-term results, yet enduring success depends on long-term commitments that involve substantial resources and thoughtful planning. This ongoing tension between immediate results and future planning creates uncertainty and increases risks in decisions related to capital expenditure and resource allocation. Contemporary leadership must navigate and balance these competing priorities. Striking this balance is vital to counteract influences with both mid and long-term impacts, such as geopolitical factors, alongside short-term challenges like labor strikes, civil unrest, and competitor imitation (Shaw et al., 2011). Leaders today must manage stakeholder expectations through quick wins while also focusing on sustainable growth and strengthening the company's future brand.

13.2. Resilience

Resilience will be essential for leadership success in the 21st century boardrooms. Today's environment demands resilience across all areas due to rapid shifts in consumer demand, frequent technology disruptions, market fragmentation, changing economic growth prospects, fluid labor markets, and low barriers to entry. Additionally, constant distractions from trends, digital platforms, and new sales channels add to the challenge. To meet both short-term and long-term goals, leadership teams must focus on core strategic elements and execute them consistently (Uy et al., 2017). This necessitates resilience to counteract inevitable hostile forces, which are likely to manifest in various forms.

13.3. Having a Horizontal and Vertical Outlook

Horizontal leadership entails the mobilization of teams and the encouragement of them to collaborate in pursuit of a common objective. In contrast, vertical leadership is primarily concerned with the top-down, military-style command of teams. Effective leadership often occupies a position between these two extremes. Organizational structures, cultural diversity, global operations, command-and-control systems, and the involvement of local entities influence today's leadership styles. Leadership is increasingly highlighting the need to empower teams to assume more responsibility and ownership as globalization advances flat. Leaders must actively listen, encourage the open exchange of ideas, and cultivate trust in collaborative workplaces, communities, and networks (Van Praag & Versloot, 2007). Although the vertical leadership style remains relevant, its function is evolving to encompass decision-making under challenging circumstances, conflict management, team guidance through ambiguity, and leadership that embodies convic-

tion, bravery, flexibility, and empathy.

13.4. Global Perspectives and Local Insights

Today, the world is becoming more interconnected, but national pride continues to be crucial for organizational leaders. An overview of company structures shows that local country units remain significant in global organizations. Many startups start with disruptive ideas at the country level before expanding internationally. This is true for both the workforce and consumers, who are essentially two sides of the same coin. Leaders must balance a global perspective with an understanding of local nuances. Effective leadership leaves a lasting impact when it personally influences individuals. It is common for new CEOs to travel globally to meet local teams, helping to balance global and local insights (Trueman et al., 2013). As organizations become flatter and local roles strengthen, boards need leaders who can navigate different cultures and regions. Simply being present is not enough; engaging with employees worldwide and locally will be a key measure of success in the 21st century leadership.

13.5. Strong Strategic Compass

Leaders and executive teams must have a distinct strategic orientation in the 21st century. Effective leaders should possess a well-defined sense of direction, be passionate visionaries, and maintain a clear sense of purpose when directing their people. Additionally, they should possess high self-awareness. Their vision must be in perfect harmony with the mission of their firm. However, given the current uncertain climate, a leader's operational approach must stay flexible. To accomplish long-term objectives, leaders must be adaptable and consider multiple strategies to achieve their goals (Singh et al., 2007). Leaders must remain steadfast in the face of substantial disturbances and confusion, much like a compass that always points north.

13.6. Globalization

All industries and communities are seeing an increase in global awareness. All aspects of society have been affected by this shift in perspective and behavior. Instead of restricting their attention to the United States, the marketing of American consumer items, industry, and entertainment has extended dramatically to a worldwide scale. The creation of multinational firms to compete in a broader economic arena has been facilitated by the trend of globalization in production, marketing, and competition. There has been a globalization of the economy (Rovira et al., 2019). Economic concerns in Mexico, Great Britain, or any other nation are currently impacting the global economy. Additionally, stock markets are now interlinked.

13.7. Increasing Stress on the Environment

The complexity of environmental concerns and their ability to sustain future

global populations is increasing. Although a single nation may be able to regulate its pollution, environmental issues are global in nature and transcend national borders. The international clash between economic and environmental interests is notably visible in discussions about old-growth forests, wetlands, fishing rights, and chemical regulation that impact the climate. The persistence of industrial runoff and similar infractions is expected to exacerbate concerns over freshwater levels. The demand for recycling is on the rise as landfills continue to be overwhelmed (Lyra Health, 2022). Furthermore, education, welfare, and health issues for both people and animals are exacerbated by complicated environmental phenomena, land development, and hazardous waste.

13.8. Increasing Speed and Dissemination of Information Technology

Mass communication has established global connections that were previously unimaginable fifty years ago. Although the Pentium processor is the most recent innovation to computers this year, the emergence of nanotechnology is imminent. Nanotechnology will enable the use of techniques in various fields, including microbiology and political science, which will significantly reduce the size of equipment and enhance the ability to process and disseminate information. In the present day, electronic data is transmitted very instantly. The Internet, social media, and major news networks facilitate the quick dissemination of information worldwide. The consequence is that individuals can be informed of events that have occurred halfway around the world in a virtually immediate manner (Stock et al., 2016). It is practically hard to maintain the confidentiality of information. “Bits” are the building blocks of information technology, and they do not exhibit the same characteristics as consumer items. Stopping consumer products at country borders and declaring their value are viable options. There is minimal regulation over the electronic transmission of “bits” across borders. The existence of a porous border inside the organizations, communities, and people may be attributed to this. For instance, the Chinese students were also connecting with the rest of the world using fax and other forms of media (Inayatulloh et al., 2021). The Chinese authorities had significant challenges in managing the instant information. There are a multitude of comparable instances.

13.9. Scientific and Social Change

The recent revelation regarding the cloning of a sheep is indicative of forthcoming advancements in genetic engineering. This sector is but one illustration of the technological discoveries that will revolutionize our lives. Medical treatments, as well as the production and cultivation of food, will be revolutionized by biomedical technology, which will also provide further information about the gene code. New political, social, educational, and organizational frameworks will be required in response to these societal changes. Additionally, the way in which gender roles are seen will be altered and disseminated. These changes will occur at a quick pace

and will have a substantial impact on one another (Hetschko, 2016). The ethical and spiritual dimensions of mankind are intricately linked to these four movements. Leaders will encounter obstacles associated with the capacity of mankind to regulate, comprehend, and enhance our interactions with these new advances. Leaders face and accept challenges with positive mind and response with courageously (Figure 17 below).



Figure 17. Leadership challenges around the world (Collet et al., 2015) and respond to those challenges (Bogoviz et al., 2019).

14. Common Challenges for Modern Leaders

Conflicts, violence, repression, and oppression have always occurred, resulting in stalemates that undermine economic stability and human dignity and circumstances in which no one genuinely wins. The human cost must be addressed in order to achieve permanent peace, regardless of whether disputes are resolvable. This duty is now entrusted to future leaders and followers. Expert contributors in “Peace, Reconciliation, and Social Justice Leadership in the 21st Century” investigate the methods by which leaders and followers might foster pacifism, peacebuilding, nonviolence, forgiveness, and social justice collaboration (Bencsik, 2020). Once more, the complexity that leaders face in the 21st century requires the establishment of three fundamental pillars: systemic resilience, network leadership, and value-based leadership. Leaders in a variety of industries have comparable internal and external obstacles, regardless of their business, location, or corporate culture. These challenges might have an impact on their everyday lives and professional endeavors. Currently, modern leaders are confronted with a variety of common issues, regardless of their location.

14.1. Honing Effectiveness

This contemporary leadership issue necessitates the acquisition of critical competencies, including strategic thinking, decision-making, time management, prioritization, and the ability to promptly adjust to the position in order to improve job efficiency. Today’s leaders must acknowledge that effective leadership is derived from the ability to comprehend the motivations of individuals, their responses to a variety of circumstances, and the confidence to have a positive influence. Authentic leadership also requires showing accountability when errors occur, avoiding blame, taking full responsibility, and using mistakes as learning opportunities.

14.2. Inspiring Others

The difficulty lies in inspiring or motivating team members to be pleased and operate more efficiently. Talent is attracted and both intrinsic and extrinsic rewards foster productivity. Although remuneration and benefits are essential, they are only one component of a more comprehensive incentive plan. Psychological wellness, joy, learning, and personal fulfillment are all intrinsic benefits that are equally significant. Motivation is not the cause of the lack of participation; instead, it relates to the quality of motivation. Sustaining long-term engagement depends on daily efforts to achieve optimal motivation, aligning and integrating employees' work with their intrinsic drives or inherent.

14.3. Developing Employees

Developing others effectively through coaching and mentoring presents a challenge. While related and occasionally overlapping, coaching and mentoring serve distinct roles. The same leader can perform both, but understanding their differences is crucial for both the coach or mentor and the individuals they support. Coaching primarily aims to improve current job performance by helping resolve immediate issues or obstacles. Research repeatedly demonstrates that firms with high employee engagement, motivation, satisfaction, and retention tend to implement distinct talent management strategies in comparison to those with lower engagement. In the present day, talent development practices are a critical differentiator.

14.4. Leading a Team

It is a substantial obstacle to the growth, management, and organization of teams. Today, fostering pride, providing support, promoting practical cooperation, managing huge teams, creating team standards, and managing duties while taking over a new team; are all critical leadership concerns (Antonakis & Day, 2018). Team norms are rules or guiding principles that influence how team members interact. They define expected behaviors, clarify work processes, and set mutual expectations among team members. Today, establishing explicit norms is essential for building trust, which is vital for a team's success. It is crucial to deliberate and reach a consensus on these standards when a group of individuals works together to resolve issues and make choices (Nsoedo, 2016). A team leader or project manager should consider the norms that matter to both themselves and the work. Understanding a modern leader's perspective can help reflect on their behavior and identify effective ways to guide the team.

14.5. Guiding Change

The role of a successful change leader presents a complex challenge particularly demanding managing, mobilizing, understanding, and leading change. It requires expertise in mitigating adverse outcomes, overcoming resistance, and managing team members' responses. Effective change management continues to be one of the most significant challenges faced by contemporary organizations. In today's

rapidly evolving environment, the strategic need for change is often obvious—without adapting, companies are unlikely to succeed or survive, especially in the context of minimal physical involvement in modern business leaders (Shet & Pereira, 2021).

14.6. Managing Stakeholders

Workplace connections, politics, and image are the last leadership obstacles. This includes garnering managerial support, managing upward, influencing coworkers, and winning permission from other departments, teams, or people. Influencing others' behavior requires fundamental methods that connect with and motivate them (Rencher, 2012). It takes more than orders to influence people. Contemporary leaders inspire, convince, and motivate. They use their team's expertise and talents to help others reach consensus and commit to success.

15. Key Characteristics of Successful Leaders

Leadership skills must be developed theoretically and practically. Real-world learning and theoretical instruction are the foundation of education in schools, universities, and adult training. On-the-job learning frequently outperforms reading, listening, and watching. In today's vocational or practice-based learning, activity helps us remember more. Many find it simpler to recall and apply than to read. Practical experience enhances competence or topic comprehension. It is considered more effective for internalizing knowledge and developing skills. Teamwork and human contact distinguish practice-based education from theoretical learning. People study together, improving their social and communication skills. Social input is essential for practical education, developing collaboration and communication skills. Hands-on practice helps people learn and complete tasks—proving that “practice makes perfect”. Practical learning helps us comprehend and demonstrate our skills at work. Absence of theoretical understanding might hinder long-term progress. Successful and modern leaders must learn specific talents and avoid toxic leadership habits.

15.1. Emotional Intelligence

Identifying and understanding our own and others' emotions and how they affect our conduct is called emotional intelligence. Though tight, regulated leadership worked in the past, the contemporary employment situation requires a new approach. Leaders can handle chaotic or stressful situations with emotional intelligence because they understand their own and others' complicated sentiments. Emotionally savvy leaders can motivate their teams, negotiate client and workplace relationships, and avoid antagonism. Empathetic leaders do 40% higher in staff engagement and decision-making coaching (Soocial, 2025).

15.2. Listening Skills

Everyone knows that excellent leaders need decent (sometimes great) communica-

tion abilities. Misconception: leaders are judged by how well they communicate, not how well they listen. Instead of finishing employees' sentences or interpreting information, supervisors should practice "active listening". Legendary thinkers have discussed intelligence for ages. Sternberg divides intelligence into practical, creative, and analytical categories, while Einstein said, "The ultimate indication of intelligence is not knowledge but imagination." Different definitions of intelligence continue to be debated. Even "book clever" people may lack "common sense". IQ tests don't measure emotional and social intelligence, which are essential for leadership and coaching. Listening to clients and staff, removing hurdles, and encouraging success can address certain issues. Leaders must follow market cues. Sometimes swift pivots are needed, although early signs are typically long-standing. Recognizing these cues improves customer interactions. As the world changes, a leader should be a constant presence that gives consumers the knowledge they need to thrive.

15.3. Establishing Trust

Top-performing teams worldwide share a common trait: trust. Future leaders will foster "psychological safety" within their teams, creating an environment where members feel secure enough to think openly, communicate honestly, and raise concerns. Trust enhances team performance, leading to faster results and lower costs. These leaders demonstrate trust in their teams, which in turn encourages more direct communication and boosts efficiency and productivity. In today's hybrid remote work environment, tech leaders must excel at storytelling through compelling visuals and remote communication tools. Rather than delivering dull presentations, they should tailor their messages to their team's personas, engaging audiences remotely with modern tools and utilizing square webcam cameras to build trust and connection team (Aghion et al., 2017).

15.4. Developing Others

Being a modern leader involves more than just executing strategies and inspiring outcomes; it includes cultivating a robust leadership culture around you. Contemporary leaders extend their influence beyond personal achievements by identifying and nurturing emerging leadership talent within the organization. Successful future leaders empower people to achieve their objectives and potential. A future leader must appreciate helping others reach their potential. A good coach and leader inspire team members to be motivated and devoted to the company's objective by explaining how their job fits into it and leading by example.

15.5. Servant Leadership

A modern leader embodies the principles of a servant leader, prioritizing serving others' needs. Servant leadership emphasizes caring for the wellbeing of employees and their communities. Unlike traditional leadership, which often centers on company or business objectives, servant leadership keeps its focus on the people.

Leaders should see their staff not as mere resources or tools, but as individuals. In today's organizations, people utilize tools; they are not the tools themselves. This is the essential first lesson in adopting a people-first approach leader.

15.6. Global Citizen

As globalization remains dominant in society, especially in business and communication, the world has transformed into a more interconnected, borderless environment. Modern leaders must address the challenge of understanding new cultures, navigating international markets, and building diverse, high-performing teams' future.

15.7. Leading Integrations

As merger and acquisition activity is expected to hit new highs again, having experience in leading integrations becomes an increasingly important skill for tech leaders. Disorganized IT systems pose a significant challenge following an M&A, particularly in today's fast-paced work environment. Tech leaders who can consolidate complex systems and create cohesive tech ecosystems will be essential in quickly generating value post-deal. With the growth of remote work, managers can no longer rely on walking around the office to engage with their teams. Instead, short videos—posted regularly—are an effective way to celebrate achievements, share information, or recognize individuals or teams (Acemoglu & Robinson, 2012).

15.8. Digital Leadership

To maximize digital transformation, an organization typically has one or more leaders overseeing asset transformation and aligning efforts with strategic goals. Usually, these leaders focus on guiding ongoing digital initiatives as the organization adapts to changing technology, product delivery, and customer demands. There is no universal leadership structure that guarantees success in digital initiatives. A single leader risks creating digital silos, while distributed leadership can lead to misalignment. In a distributed setup, digital initiatives may become a persistent problem—once a leader adopts them, they struggle to eliminate them. To prevent digital efforts from draining resources and becoming unmanageable, it's best to maintain clear boundaries unmanaged (Berdahl et al., 2023).

15.9. Advanced Technology and Technology Leadership

Technology leadership today and in the future requires more than technical ability and a distinguished title. Technology executives must have a balanced, adaptive skill set to navigate the fast-changing tech world. Leaders can navigate tech complexity by improving three fundamental abilities. Technology executives must balance strategic vision with technical specifics. Technical details can distract from overall aims. IT leaders must combine strategic thinking with practical tech expertise. They must also promote cybersecurity knowledge from interns to C-suite

executives. This is a critical situation requiring teamwork. Technology executives need emotional intelligence to build good teams. A leader's effectiveness depends on recognizing team members' emotional and professional demands. Managers should tailor their approach to each team member since everyone is different. A competent leader tailors their management approach to each individual to maximize performance.

15.10. Adaptability and Continuous Learning

Technology executives must adapt to continual change. Leaders should welcome change as well as adapt. They should encourage course, webinar, and workshop attendance to keep their teams flexible and resilient. A tech leader's role extends beyond understanding coding or chasing trends. It combines technical expertise, cyzzy awareness, emotional intelligence, and more. To guide their teams effectively through the fast-changing tech landscape, leaders must balance practical skills with strategic vision, promote ongoing learning, and uphold ethical standards (Lohr, 2017).

15.11. Data Driven Decision Making

Technology executives must be data-savvy. Without facts, a leader will guess, which is perilous given the stakes. Data gives technology executives actionable information, minimizing intuition (Robitzski, 2018).

15.12. Strategic Vision and Foresight

Monitoring emerging trends is crucial for technology leaders. What are the key industry shifts? How can a leader align their tech strategy with overall business objectives? Effective technology leadership involves not only managing current needs but also predicting future trends. Anticipating these changes allows a leader to gain a competitive edge as a first mover.

15.13. Stakeholder Communication

Non-technical people find tech jargon perplexing. Tech leaders can help stakeholders understand complicated terms. Technology executives must bridge IT and other areas. Company technology should not be separated. Contemporary leadership must integrate IT with other areas for a united approach. Despite the job's complexity, more strategic board reporters must learn to interact with laypeople. Tech CEOs may boost their long-term success and benefit their successors with a well-crafted ten-minute board presentation (Forbes, 2022).

15.14. Ethical Responsibility and Sustainability

With great power comes ethical responsibility. Technology executives must consider ethical issues. They must ethically address moral issues in data privacy and AI ethics. Green technology is vital, not a trend. Promoting tech leadership sustainability is ethical and profitable.

15.15. Innovation and Creativity

Technology leaders should foster innovation. Teams need confidence to discuss their breakthrough ideas. Innovation sometimes breaks rules being open to change in IT leadership and which can pay off in the long run.

15.16. Project Planning, Management and Delegation

Tasks must be accomplished on schedule and within budget. Technology executives need project management skills to transform amazing ideas become reality. Knowing when to delegate and trusting the team's competence are signs of mature leadership. Goal-oriented leaders need good project planning and delegating abilities. Planning simplifies difficult activities, whereas delegation allocates them to team members to guarantee timely completion. Goal achievement, team concentration, and project success depend on these qualities.

15.17. Context Switching

Tech leaders should learn context switching. They must swiftly switch from sales to product development, creating value and analyzing new information. Prioritization and smooth transition between tasks are crucial (Kurzweil, 1999).

15.18. Collaborating Across Organizations

Tech leaders must work throughout the business and recruit the proper team members to provide innovative, complete customer solutions. This requires bringing together multiple groups, especially customer-facing ones, to understand the product, pain areas, and possibilities. A good product service requires a comprehensive picture of the situation (Ford, 2016).

15.19. Creating Automated Solutions

As technology advances, tech leaders need a comprehensive understanding of current and future automation processes and solutions. They must also maintain effective communication and collaboration with R&D teams to ensure successful product releases that deliver value to customers (Expert Panel, 2025).

15.20. Adaptability

Tech and customer behavior are changing fast, as are company demands. The pandemic revealed significant gaps in business continuity and security. Understanding these shifts and developing innovative solutions to address these gaps, making businesses resilient for the future, is where a tech executive can truly excel now and move forward. Contemporary leaders must communicate why their top priorities matter and explain what benefits they bring to the business, supporting it all with quality, market-based data for impactful results.

15.21. Comprehensive Digital and Smart Transformation

Tech leaders need to integrate all components of digital transformation—AI,

blockchain, cloud, and data—and develop products that enhance synergy across digital strategies. Today, it is essential to focus on data-centric and cloud-based solutions. Blockchain should be utilized to ensure data immutability, while AI engines can improve the accuracy of analytics (Wang & Ben, 2007).

15.22. Bridging the Tech Knowledge Gap

Every tech CEO must explain technical topics to non-technical audiences. Bridging technical and non-technical stakeholder knowledge gaps offers several opportunities. When employees, customers, and outsiders understand what is happening, everyone benefits (Turchin, 2019). With ChatGPT, AI can now serve regular people instead of technical systems. It reached 100 million users in two months, making it the fastest-growing consumer app ever. AI democratization with broad access is exciting, but it creates social challenges. Elon Musk and over 1000 other industry executives have asked for a stop in AI research due to concerns about its impact on mankind. AI automates time-consuming operations, which can enhance organizational productivity. Teams also worry about AI replacing their employment.

15.23. Understanding of Quantum Technology

Businesses will face impact and possible disruption from advancing quantum technology breakthroughs. It is now crucial to educate ourselves on these transformative developments, considering both technological and business impacts. The moment to study, evaluate, and pilot quantum is now, even though its full potential will emerge in the medium future (Baraniuk, 2018). Anything agile is trendy now. Cryptographic agility is essential for shifting to post-quantum techniques, not merely a fad. When quantum computers become millions of times more powerful, most traditional encryption approaches will fail. Crypto-agility will be essential for post-quantum resilience. China is investing more on quantum computing than the West. A quantum processor a million times faster than the world's fastest supercomputer was unveiled in October 2021 (Carayannis & Draper, 2022).

15.24. Innovation

Leaders focused on innovation enable their organizations to stay competitive, adapt to market shifts, and open new growth opportunities. They can discuss strategies to cultivate an innovative culture, promote creativity and calculated risk-taking, and develop processes that support and integrate new ideas. By committing to these efforts, leaders can help their organizations stay market leaders and seize future success (McLean et al., 2021).

15.25. Diversity, Equity, and Inclusion

To create a fairer and inviting workplace where all employees feel valued, respected, and supported, leaders must advocate for diversity, equity, and inclusion.

Their intentional diversity promotion may create a workplace that values varied viewpoints and cultures. This fosters inclusion and mutual respect, which improves worker collaboration and communication and boosts productivity. Leaders may design methods to foster diverse and inclusive teams, remove unconscious biases, promote justice, and create an equal workplace.

15.26. Effective Virtual Leadership

Since remote and hybrid workplaces introduce unique dynamics and challenges compared to traditional offices, leadership skills must be adapted accordingly. Modern leaders should address issues like collaboration barriers, reliance on digital tools, and limited face-to-face supervision when managing teams. As remote work and virtual teams grow, effective virtual leadership has become increasingly important. Leaders who manage remote teams well, can ensure consistent performance, engagement, and collaboration across various locations and time zones globally and are comprehensive (shown in **Figure 18** below). They should explore best practices such as communication, trust-building, and team development strategies. Additionally, leaders need to find ways to reduce remote employees' feelings of isolation and promote a sense of belonging within virtual teams. Regular check-ins and online team activities that emphasize open communication and trust can help achieve this goal.



Figure 18. Comprehensive overview of leadership (Lattimer, 2023) in global perspective (Shevlin et al., 2019).

15.27. Problem-Solving

Effective problem-solving leaders help their organizations overcome obstacles, adapt to change, and discovering new growth opportunities. These leaders are adept in problem-solving frameworks, diagnosis methods, and solution development and evaluation. These traits help their teams and companies succeed. Our view of leadership, growth, and education will evolve (Sowcik, 2015).

15.28. Conflict Resolution

Conflict resolution-savvy leaders can facilitate discussions between disputing parties, foster a safe environment for open communication, improve team cohesion, and guide collaborative efforts toward resolution. They also foster empathy and understanding, which are essential for success.

15.29. Inspiring and Influencing the Team

Leaders who set an example may inspire their colleagues to succeed and create a healthy work environment. Contemporary leaders show that big ambitions are achievable and inspire change by sharing their experiences. This approach helps foster unity and collaboration within the workplace, creating an atmosphere where employees are motivated to work harder and aim for higher excellence (Khan, 2024).

16. Modern Leadership Practice in the 21st Century

Professor Peter Drucker famously observed, “Wherever you see a great firm, someone once took a daring decision.” Leadership in the 21st century requires several brave choices. These times are harder, but positive leadership may have a stronger influence. Only the two World Wars have caused stronger headwinds for global business. It takes bravery, conviction, mental toughness, focus, and a strong sense of purpose to lead a company through such volatility. Leaders cannot advance alone, a pertinent reality now. Open-minded, collaborative, charismatic leaders can connect varied viewpoints and lead teams with varying motives and requirements to achieve corporate goals. Seeing business executives as figureheads, chiefs, or commanders is fading. Charisma and vision are still necessary but insufficient. In today’s changing corporate world, leaders must be able to switch from commander-in-chief and mentor to high-performing teams or individuals (Tepper et al., 2007). Leadership adaptability and effectively leading across generations, cultures, attitudes, and motives are act as key. Leadership in the 21st century requires numerous traits as follows.

16.1. Purpose

A cause is necessary, but an inspirational one is crucial. Leaders should link their personal purpose—“what I want this company to achieve”—with the organization’s basic mission—“what this organization stands for”. Companies and leadership teams require a purpose beyond sales and profit goals. Leadership must demonstrate dedication, vision, and purpose, not merely talk about it. Leaders who don’t practice what they teach and lack concentrations are swiftly disregarded.

16.2. Networks

Many leaders overlook the strength of networks within and outside their organizations. Leveraging these networks offers several benefits, including:

- Gaining a deeper understanding of key stakeholders within the organization.
- Recognizing teamwork and innovation barriers.
- Send important messages to significant stakeholders efficiently.
- Identifying and hiring leading talent in the industry.
- Identifying potential new suppliers, technologies, consultants, or industry leaders who could facilitate the acceleration of business performance.

- Developing, designing, and executing successful career pathways.

16.3. Long-Term Lens

Modern leaders must prioritize long-term strategy above short-term tactics and plan forward rather than get caught up in details. Strategic execution requires a forward-thinking vision. Finding internal stakeholders, investors, and shareholders with similar long-term values and working with them is beneficial. S&P Dow Jones Indices launched the Long-Term Value Creation Global Index in 2016 to help investors track value-growing firms. Maintaining a long-term focus outside requires good communication of objectives, roadmaps, and execution strategies inside.

16.4. Adaptability and Agility

Great leaders are often recognized for their exceptional ability to think beyond conventional boundaries. Instead of constantly reinventing procedures, they learn to creatively utilize existing tools and inspire others to do the same. In the 21st century, leaders must continually innovate and effectively handle disruptions. Achieving this requires recognizing that each person has valuable input and fostering a culture where employees feel free to share ideas and solutions. Such an environment helps build an adaptable, agile organization ready to navigate disruptions.

16.5. Culture Orientation

Finally, leaders must never take their employees for granted. Continuous investment in skills training, coaching, and welfare is essential for employees at all levels. Research indicates that millennial now make up about one-third of the global workforce, seeking more flexibility and control over their careers while still pursuing advancement. Leaders should recognize these broad shifts in workplace attitudes but remain committed to core values to uphold brand strength and organizational culture. Consequence of neglecting people is high risks of turnover, hindered growth, and a weakening of organizational identity and vision (Guzmán et al., 2020).

16.6. Homogeny and Equivalence

People live, work, lead, manage and communicate differently every day. However, a 21st century leader must treat subordinates as participants of the organization rather than as recipients of orders. In this regard, a leader should establish a sustained trust and community inside the business. Leaders must also realize that strategic communication helps their teams accomplish the right thing, not simply correctly. This requires rigorous internal and external relationship management to enable organizational growth (Zerfass & Huck, 2007). Organizational members want a leader who can inspire and assist them succeed. A leader leads by example and communicates well. Therefore, leaders must “walk the words”. Leaders now

collaborate more with team members (Rost, 1993). Thus, leadership depends on subordinate relationships as well as the leader's duty. Coworkers and employees must communicate to share information, coordinate and complete tasks, support decision-making, and resolve issues. Organizational communication supports practically every human process, including conflict, collaboration, decision-making, power and authority, compliance, resistance, morale, cohesiveness, and organizational cultural linkages (Littlejohn, 2010). They work together to create, sell, or serve the public, including clients, customers, or similar entities (Fossum, 1989).

16.7. Effective Communication

Beebe and Masterson defined communication as acting on information (Hossain, 2025b). It also allows individuals to interpret the world and share their understanding by sending and receiving signals concurrently. In-person communication is usually the most effective way to explain meaning and overcome misunderstandings (De Vries et al., 2010). Research indicates that how group members communicate significantly influences collaborative outcomes. Communication roles in the workplace include managing interactions between employers and employees for motivation, aligning organizational needs and goals, and supporting decision-making. Typical communication roles also involve being a gatekeeper, liaison, bridge, isolator, cosmopolite, and opinion leader. Leaders must grasp communication skills today to succeed. Because leaders guide organizations, they must communicate well. From small stakeholder concerns to enterprise-level choices costing millions, good communication supports seamless operations. Communication is vital to good service, delivery, and growth across activities and actions at all organizational levels. Leaders manage information flow using multiple communications means to build strong, well-informed, and meaningful work connections. 21st century leadership is summarized as follows.

- To foster a supportive environment where individuals can flourish, develop, and coexist peacefully with one another.
- To promote environmental harmony and future sustainability.
- To develop communities of mutual care and shared responsibility where everyone is respected and their welfare and dignity are supported.

16.8. Clear Direction

Clear direction and communication are crucial for effective leadership in the 21st century organizations. Contemporary leaders must understand how to use advanced technologies effectively. They also need to set the right direction and align their teams toward common goals. Importantly, future leaders should treat subordinates as members of the organization, as consistent and sound leadership influences employee motivation and performance. To achieve this, leaders should use practical tactics that help establish clear direction to subordinates (Mai & Akerson, 2003).

- Aim for a single objective whenever possible, but ensure it aligns with everything else.
- Keep the discussion focused on two or three main points.
- Focus on highlighting the main points.
- Convert the strategy into operational terminology.
- Repeat once more.
- Articulate the rationale underlying any actions or decisions.
- Invite questions and patiently wait for responses.
- Provide a concise summary and a clear explanation.

17. Collaborative Leadership: A New Concept

Common terms for collaborative leadership include shared, participatory, collective, cooperative, democratic, flexible, inclusive, roaming, diffused, relational, and post-heroic. The exact phrase is debated, but hierarchical leadership techniques no longer meet the complexities, quick changes, interdependencies, and numerous difficulties we confront today (Block, 1993). In the information era, motivating a more educated workforce to be devoted, self-reliant and to be lifelong learners will be difficult. Democratic “people-centered” leadership believes that in complicated times, answers are discovered in communities—group-focused organizations where “everyone can learn continually”. Partnering, co-leading, and collaborating with followers are growing. As this leadership style becomes more popular, top-down command leaders are encouraged to become facilitators, stewards, mentors, designers, and teachers. They should guide, inspire, delegate, and serve. In the 21st century, this new paradigm is changing follower roles and organizational structures. Robert Greenleaf Center for Servant-Leadership booklet notes this shift: The ancient organizational pyramids of the nineteenth century are disintegrating, replaced with upside-down pyramids, circles, and connections (Tepper et al., 2007). Collaboration and reciprocal leadership define this transition process. This leadership style is more flexible and relationship-focused; therefore, we want to assist individuals in grasping its purpose and applying its ideas to their leadership circumstances. Progress combines past, present, and future. This knowledge provides a solid foundation for navigating tomorrow’s uncertainties, as collaborative institutions have historically supported people and may help us shape the future together (Goldstein, 1993).

A key concept of collaborative leadership is that no one individual can address a group’s complicated problems. Effective leadership in this situation requires principles that allow everyone to contribute and a process that draws forth the group’s wisdom. These concepts should be based on the idea that individuals can solve their problems with knowledge and creativity. They encourage groups that operate together based on shared vision, ownership, and mutual support (Greenleaf, 1991). Natural sciences and history have shaped collaborative leadership. Instead of a mechanical cosmos where people obey instructions and repeat replies, we now understand how people, groups, and organizations work organically, sys-

tems-based, and dynamically (Trilling & Fadel, 2009). This systems approach requires nonlinear, comprehensive, multifunctional leadership that emphasizes active involvement, open communication, constant learning, and relationship focus. Leaders create systems, institutions, and situations that encourage learning and engagement. Leadership entails establishing the appropriate patterns.

The remark, “we must be what we aspire to become, we must, at every step of the road, embody the future toward which we are aiming”, reflects this feeling of authenticity and the capacity to fully embody the ideals of collaborative leadership. It is reminiscent of Mahatma Gandhi’s conviction that leadership is fundamentally about personal development, as he famously stated, “We must be the change we desire to see in the world...” Every individual has the potential to cultivate their leadership characteristics with the appropriate education, training, and comprehension. Given that these are the fundamental principles of collaborative leadership, what are the main activities or functions that leaders should implement? In essence, the functions of collaborative leadership involve few aspect like the recognition of significant developing trends that steer us in this direction; the adoption of a communal and reciprocal leadership paradigm; and the focus on purpose rather than strict definitions of leadership (Thoroughgood, Hunter, & Sawyer, 2011).

18. Collective Leadership: Another Modern Concept

The establishment of an environment that fosters collective leadership starts with a shared vision that is supported by specific values or beliefs that impact individual behavior. For those who intend to implement this leadership style, it is imperative to engage in some form of introspection. Authentic communal or shared leadership is impossible to attain without this internal effort. This internal process starts with one’s ideals and convictions. Those who engage in shared leadership believe that each individual can lead themselves. Additionally, they believe that the group members possess the necessary abilities and resources to complete tasks, rather than relying on a single leader. As a result, the function of formal leaders is not to direct or command, but to establish a framework that empowers individuals to assume responsibility for their actions. The group can take responsibility and develop their abilities to interact, deliberate, plan, and act by distributing or sharing the “power” connected with their position. These leaders are capable and willing to transfer their positional authority to the maximum extent feasible, so keeping their power while sharing their official authority (Wheatley, 1992). They may substitute the necessity for positional leadership with the joy of observing the group develop into a learning organization or community. Modeling behavior is a critical component that follows the establishment of a common vision. Integrity is obvious in the manner in which they structure and respond to the group’s progress, as seen by their vision of shared leadership. This confluence of practice, vision, and modeling provides members with the assurance that leaders actually “walk their talk”, demonstrating their confidence in the collective and individual

actions. Collective and reciprocal leaders prioritize the development of the environment as a learning environment. This may entail the following: Establishing expectations for success. Secondly, motivating the group to challenge conventional methods and take chances. Additionally, they encourage members to challenge their assumptions on their capabilities in the absence of explicit direction from a positional authority.

The establishment of a safety net facilitates risk-taking by fostering an environment in which members feel comfortable challenging, making personal decisions, and pursuing common objectives. In this setting, individuals exchange their liberty for safety. Members must engage in responsible and accountable decision-making in order to advance toward shared leadership. Open sharing of information ensures that all individuals have sufficient knowledge to make well-informed decisions. It is not necessary for leaders to serve as the primary sources of information; rather, members frequently rely on one another and their capacity to collect precise data, which promotes interdependence and self-reliance. Successes enhance members' belief in their ability to affect outcomes, which is facilitated by the acquisition of power, choice, and knowledge. These interdependent ties facilitate the acceptance of a variety of preparedness levels for shared responsibility and explain the allocation of skills within the group. Additionally, they demonstrate to their members that they can rely on and learn from one another. These frameworks facilitate efficient task cooperation (Wu & LeBreton, 2011). Groups must be reassured that emotions of uncertainty or fear are common throughout the transition to this new strategy. Confusion, irritation, worry, insecurity, and a need for leaders to interfere are among the most prevalent emotions. This transformation transforms the duties of leaders into those of facilitators, supporters, advisors, or educators. In the end, members develop better ideas through learning, which fosters enthusiasm, ownership, confidence, and competence.

19. Principles of Modern Leadership in the 21st Century

Modern leaders are illustrious by their emphasis on adaptability, collaboration, and purpose-driven action in a rapidly changing world. They prioritize innovation, emotional intelligence, and creating inclusive environments (Drucker, 2001). Examples include figures known for their visionary leadership, like those who spearheaded the digital revolution or championed social change, alongside leaders who foster collaboration and resilience in their organizations and communities. Today the world has become more unified and works within a global financial and economic eco-system (Maguire & Delahunt, 2017). The financial crisis that occurred in the year 2008 has extremely destroyed the economies of the developing and least developing nations with economic recession, political and social instability as well as overall life style of mass people. It is obvious what set back happens to one side of the world will affect complete global economic system. Organizations emerging in the 21st century have become more complex in the

fields of information and communication technologies along with digital and smart technology like IoT, AI, ML, DL, big data, blockchain, etc. This situation has made changes to the way people relate to each other, the way they communicate and their career life and skills. Therefore, to be success within an organization, a leader has to acquire essential skills, tactic, system, and knowledge especially within information and communication technology (Stevenson & Weis McGrath, 2004). Modern leaders in the 21st century inspire others to align their thoughts and actions with a compelling vision. Successful leadership depends on factors such as vision, communication, rational intelligence, emotional intelligence, and spiritual intelligence. Consequently, the fundamental principles of leadership today can be summarized as below.

- In the present day, leadership is accessible to anyone, as each person is actively involved in service. According to James M. Strock, if leadership is primarily about helping others, then every human should be capable of moving between the positions of leader and follower.
- People are the most significant asset of any organization. Mark Zuckerberg stated that the increasing emphasis on cultivating deeper social interactions and better connections and trustworthiness is one of the most fundamental changes that enhanced openness and transparency.
- We are moving from a world focused on transactions to one centered on relationships.
- Leadership is a relationship between empowered and willing adult individuals.
- Leadership is a dynamic relationship. Today, it is often seen as the answer to any problem. Managers are now expected to demonstrate qualities such as being “visionary”, “charismatic”, “transformational”, and “authentic”. These traits are considered essential for “followers” to perform effectively, potentially.
- A key aspect of leadership in the 21st century is communication. Possibly because of his age while in office, his sometimes inconsistent communication skills, and his inability to clearly articulate a forward-looking view on civil rights issues, Dwight Eisenhower has often been underestimated.
- There is no single leadership style that fits all. Mahatma Gandhi stated that every action reflects one’s priorities. The brain is a remarkable organ; it begins functioning as soon as we wake up and continues until we arrive at the office (Hossain, 2024).
- The duties of leadership are becoming increasingly interconnected. Theodore Roosevelt famously stated, “Words are instruments to me.” I endeavor to convey to my audience that I am genuine, that my words are meaningful, and that I adhere to the fundamental principles of civilization.
- A leader’s unique duty is to create and share an inspiring vision. Some critics say Ronald Reagan’s accomplishments in various careers, including his two-term presidency, were just lucky breaks. Still, there is no evidence to support this claim. While Reagan’s successes are impressive, they cannot be solely blamed on luck or coincidence (Azquotes, 2025).

- Love represents the most elevated form of leadership relationship. Martin Luther King, Jr. stated that anyone can be great because everyone can serve. An employee doesn't require a college degree to serve, nor do people need perfect grammar to make a difference. All that is needed is a heart full of grace and a soul driven by purpose, love (Hossain, 2023j).
- Character is a competitive advantage. According to William Shakespeare, "Love everyone, trust a few, do evil to none." Winston Churchill once stated, "It is of little consequence to be nice when one must murder an individual."

21st century leaders must think modernly to solve problems. Honesty, flexibility, agility, adaptability, modesty, courage, judgment, and innovation are key characteristics of modern leaders. Again contemporary or modern leaders should interact directly with their teams to foster creativity and transformation. Effective leadership now entails transitioning from output-focused to people-centered management, adopting innovative tactics for contemporary situations, and proactively introducing new procedures while motivating teams to embrace change. This modern approach emphasizes diverse skills like fostering innovation, collaboration, a sense of purpose, and resilient teams; maximizing each team member's potential; leveraging data to improve performance and growth; maintaining productivity in remote settings; and committing modern leaders to adaptability (Rose, 2008). Effective communication and active listening are needed for modern leaders to understand their teams' sentiments, issues, and ideas, making employees' listening tools critical. Leadership in government, non-profit, and education has unique challenges in making strategic, business-oriented choices. If badly planned or implemented, these high-stakes decisions can have catastrophic implications (MIT-IEA, 2025). Today leadership not only increases performance but also well-being. It is a win-win for everyone. Modern leader prioritizes their (own) well-being. Too many leaders (almost 40%) are experiencing burnout. When anybody is in this state, it's far more challenging to recognize what's going on around you and how you can influence optimal outcomes in work and life. Self care and well-being are essential for leaders to be able to maintain the energy for their roles.

20. Conclusion

In the 21st-century, technological revolution plays a major role where communication and information technology, along with digital and smart technologies, change the practices of contemporary organizations. It is an era that humans are facing immense challenges where continuous solutions are in need. In this era, leaders with skills and competencies have the ability to drive through these obstructions. Technology is transforming leadership content, distribution, and access. New technologies have accelerated human understanding throughout history. More digital solutions are helping leaders enhance their own knowledge and intelligence without mentors or coaches. Digital and smart technology may save expenses. Advanced technologies help overburdened leaders deploy the impending wave of assistive technology, making them crucial today. In this age of rapid

digital and smart technology improvements and the need for more powerful equipment to handle software and application upgrades, using technology alone to solve organizational problems appears naive. During scientific and technical advancement, trained, qualified, and competent human resources are essential. The technology in issue may help modern leaders grow personally and professionally and help human resources, companies, society, and nations mature. Advanced technology, especially digital and smart, provides benefits and risks that should not be ignored. Workplace toxicity lowers employee morale, making them feel unloved and unmotivated. This attitude may swiftly permeate across the company, hampering collaboration and teamwork. Harmful leadership actions cause emotional weariness and quietness among nurses in the statutory context. Organizations suffer greatly from them. Therefore, toxic leadership is a severe hazard to any business and must be avoided.

Good leaders foster constructive and friendly work environment, drive innovation and development, and motivate and inspire employees to attain their full potential and achieve goals. However, not all leaders possess these qualities. Some exhibit toxic personality that can undermine morale, suffocate creativity, and generate a culture of stress, anger, and bitterness. Today, millennial, comprising a significant portion (around one-third) of the global workforce, are largely driven by a desire for flexibility and control over their careers, while still aiming for professional advancement and opportunities for personal growth. However, this trend is contrasted with the younger generation, Gen Z, who may even further prioritize work-life balance and a focus on meaningful work over traditional career advancement. On the other hand, personal well-being is crucial when using technology as a leadership tool. Leaders must value health, family, and friends. Leaders' physical and mental health affects decision-making and effectiveness. Prioritizing self-care, work-life balance, and organizational well-being is essential. A supportive family gives leaders emotional stability and determination to overcome problems. Long-term success requires good family bonds. Trusted connections outside of work enhance their life and leadership skills by providing diverse viewpoints, emotional support, and opportunities for personal growth. Many great leaders have used technology to alter businesses, organizations, education, and services. SpaceX, Neuralink, and Tesla founder Elon Musk leads in renewable energy, space exploration, and sophisticated tech. Microsoft co-founder Bill Gates revolutionized the personal computer and concentrated on global health, education, and poverty through the Bill & Melinda Gates Foundation. Apple co-founder Steve Jobs has revolutionized technology and entertainment with the iPhone and iPad, stressing user experience and design. WhatsApp, created by Jan Koum and Brian Acton, have connected millions worldwide. Leaders like Malala Yousafzai or Greta Thunberg, who have championed human rights and environmental protection, inspire global action.

This is the era of smart technology. According to MGI projections, AI is anticipated to need the transition of around 75 million to 375 million jobs worldwide

by 2030. At the same time, the MGI study underscores the creation of new positions and responsibilities. Researchers from the American Economic Association concur with the MGI's forecasts, concluding that while certain tasks are agreeable to automation, only a small number of occupations can be entirely mechanized. Additionally, they anticipate that employees will undergo training to assume their new responsibilities including entire management and leadership pattern will change remarkably. A good leader can influence and drive others. Contemporary leadership requires no power, fortune, education, position, or prestige. Instead, charm, persuasion, and influence steer leaders. Leadership is a mentality, not a function or title, and involves conduct, attitude, style, viewpoint, and personality. Modern leadership inspires, motivates, and influences via passion, not command and control. Modern managers' link people, develop relationships, and socialize. They must empower employees by identifying and utilizing their unique abilities and resources. Leaders must create connections, support, and resolve difficulties in today's complex, varied organizations. They must listen like coaches to lead and orient their troops. When external conditions are challenging, stability and security are sought within. Future management must create a worldwide social system for employee direction. To maximize organizational value, modern leaders should prioritize key duties that only they can do and delegate. Self-awareness and leadership brand definition are improved by this method. Effective leaders are rated by how successfully they perform primary duties and solve leadership problems. Modern leaders need to understand and manage emotions, both in themselves and others, are essential for building trust, fostering collaboration, and navigating complex situations. They need to articulate a clear sense of purpose and align their actions with a greater good, inspiring others to contribute to something meaningful. They also need to understand and leverage technology to enhance communication, collaboration, and decision-making.

In the 21st century, there are few modern leaders who spearheaded the digital revolution, like Steve Jobs or Bill Gates, demonstrated vision, innovation, and the ability to disrupt industries. Modern leaders, who foster teamwork and inclusive environments, usually have led successful international collaborations or promoted diversity within organizations. Modern leaders should have the ability to quickly adjust to new situations and embrace change is crucial in today's dynamic environment. They need to articulate a clear vision for the future and develop strategies to achieve it, considering long-term implications. They need to encourage teamwork, open communication, and shared decision-making and which is vital for leveraging diverse perspectives and achieving collective goals. Modern leaders should have the ability to create environments where all individuals feel valued, respected, and empowered to contribute their unique talents is paramount. They need to maintain high ethical standards and make decisions that are both responsible and sustainable which are critical for building trust and long-term success. They must be committed to ongoing learning and development, staying abreast of new trends and adapting their approaches accordingly. In the

21st century all types of organizations demand a more collaborative, adaptive, useful, technology-entered, and purpose-driven approach. In this century, leaders prioritize psychological safety, long-term thinking, flexibility, balance, accommodation, and innovation as a collective effort. They understand that leadership is not about holding power, but about empowering others and creating a positive impact.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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