Leadership Development and Challenges in Twenty-First Century

Hossain KA[1], PhD

Abstract:

In twenty-first century world is evolving rapidly and the effective use of technology has become a crucial aspect of leadership development. Now, technology profoundly influences every aspect of our lives, transforming the way we interact, manage daily affairs, and conduct business. Digitalization and smart technologies are likely to change the way that future leaders cooperate with their teams and stakeholders. Globalization will necessitate effective connections with friend and foe as well as colleagues and stakeholders from different cultures, attitudes and backgrounds. Future leaders need an understanding of international markets, geo-political situation, global economy, regulations, etc. Leaders who are able to incorporate sustainable practices into their task, action and operations will be better equipped to compete and struggle in a rapidly changing world.Future leaders need to delegate more to others in their team. It will make them more productive in tackling leadership challenges, and will empower their colleagues and followers to take more ownership. Future leaders will build more trust on their team if they delegate more. They must be proactive to finding vision, in setting goals, to making strategy and plan, to establishing the timelines and deadlines and necessary to keep themselves and their teams on track. In this exclusive study, author has taken effort to explorethe theory of leadership, its development and challenges, future leadership concept, along with idea to develop personal leadership.

Key Words: Technology, leadership, digital, smart, IoT, AI, style

Introduction

In the twenty-first century, modern leadership is far more important than conventional leadership. The typical leadership strategy of being 'the boss' and imposing control, power, and authority is just ineffective, especially when followers or teams are working remotely.[1]Today's leadership necessitates certain attributes and working styles, all of which are required for efficient management of present workforce. Today's leaders are all about connecting employees to their purpose, accomplishments, and one another.[2] They demonstrate how their employees' work makes a difference, how it advances the organization's mission, and why it matters.[3] And today's leaders empower and encourage their colleagues and followers to achieve great things by leveraging advanced technologies with zeal, initiative, honesty, and vision. Before embarking on any technology-driven effort, a leader must ensure that their plan, strategy and decision to meet three important criteria: technical feasibility, financial viability, and legal acceptability. While considering technical feasibility, a leader must determine whether the proposed technology is compatible with the organization's vision, infrastructure and capacities. Detailed technical examinations will assist to determining whether the plan and strategy can be successfully implemented and achieved. Any plan and strategy must be financially viable. Leaders must examine the cost and expenditure of implementing any new decision or plan or strategy or technology. They should calculate the Return on Investment (ROI) and see if the benefits outweigh the costs. They need to examine few aspects like, initial investment, expenditures, maintenance cost, prospective revenue generating, future benefits, etc. Finally leaders need to critically analyze the total plan and strategy whether it is legally permissible along with local and international roles and regulation. They need to execute and negotiate legal and regulatory authorities and frameworks in order to assure and accomplished compliance.[4] To prevent legal ramifications, they must be aware of social norms, values, beliefs, data privacy rules, intellectual property rights, related restrictions and future consequences.

---

[1] Hossain KA, PhD is former Head at NAME, MIST and professor/researcher/Examiner at BUET, Dhaka, Bangladesh. email: kahossain756@gmail.com

The history of technology is a tribute to human inventiveness and its impact on society. Understanding this history allows leaders and executives to comprehend the transformative power of technology in their decision-making processes.[5]Leaders distractions that they face can make total things easy to lose sight of long-term and even short-term goals.Leaders can easily get sucked into dealing with vital issues that arise unpredictably rather than staying focused on producing the outcomes that matter most to their organization.[6]As we know that, the invention of the wheel revolutionised transportation and trade, allowing civilizations to flourish. Leaders of that time recognised the potential of this simple but powerful invention or device and used it to extend their empires. The invention of the steam engine signaled the beginning of the industrial revolution, which transformed manufacturing and transportation. Leaders and inventor like James Watt used this technology to propel growth and revolutionise entire industries and globe. The introduction of computers and the digital age boosted the rate of invention.[7] Leaders that embraced digitization acquired a competitive advantage by reducing operations, boosting communication and growing market influence. The world is undergoing a digital and smart transition as a result of technology. Leaders now have access to the Internet of Things (IoT), Artificial Intelligence (AI), Machine Learning (ML), blockchain, etc. which enables automation, data-driven decision-making, and predictive analysis, as well as other advanced technologies. These technologies have enormous promise for optimising operations and creating new opportunities. AI is a developing technology with extensive applications in various industries, businesses, service sectors, organization and many aspects of daily life. Apps based on AI technology are already popular in a variety of sectors. Today, any organisations, industries, companies, service sectors, and academic institutions are already utilising this diversified technology. In future almost all organizations, businesses and service sectors will use AI to streamline and optimise their processes.[8]

Actually leadership is an art and a science as well as a compound and multifaceted discipline that has been studied and debated by theorists, academicians and practitioners for centuries. Neuroscience has shed new light on the human brain and its capacity for leadership practices. Leadership is the process of influencing, motivating and inspiring others to achieve a common goal.[9] It involves setting a vision, goals and communicating those vision/goals to others, as well as empowering them to attain and achieve those. Future leadership requires a range of skills and competencies, as leadership skills.[10] These skills can contribute to the ability to inspire, motivate and guide others towards a common and collective goal. Leaders, who act and work in accordance with moral principles, values and beliefs, and must lead by example, are more likely to be trusted and respected by their team members.[11] Leaders who recognize their own pros and cons, strengths and weaknesses, and seek feedback and guidance from team members are more likely to create a culture of continuous learning and improvement within the team. By demonstrating flexibility, humility and trust, future leaders can foster a collaborative and supportive work environment that encourages team members to learn and grow better in this century. Leaders who possess the ability to understand and respond to the emotions and needs of team members are able to create a supportive, comfortable and collaborativework environment. Leaders who are willing to become accountable, to take risks and make difficult decisions are more likely to inspire and motivate their team members and others.

Leadership in the technology driven twenty-first century necessitates a solid foundation of basic principles. While technological proficiency is crucial, future leaders must also exemplify a set of characteristics such as honesty, accommodative, adaptability, balance, empathy, flexible and so on. It has proven that, transparent communication builds trust and teamwork among team. Leaders must be honest with their teams, stakeholders, and themselves to creating an environment in which ideas and feedback can flourish. Leaders must adapt to changing technology. It enables leaders to negotiate problems, welcome new ideas, and capture emerging opportunities in a quickly changing market.[12]Effective leaders find a balance between technological and human factors. Harnessing technology is critical and it is also critical to prioritise empathy, emotional intelligence, and interpersonal interactions.[13] The future leaders will not try to manage; rather they will provide direction and then step back in twenty-first century. They will promote collaboration, shared leadership, creative thinking, as well as continual support and encouragement. In fact, leaders will need to adapt new forms of communication and collaboration to be effective and successful in future context. Now, the growing importance of diversity, globalization and inclusion in the workplace is significant. It will require future leaders to develop new intelligent, skills and strategies for managing and motivating diverse teams and followers from the remote location. This will require leaders to be more aware of and sensitive to the needs of team members and followers from different backgrounds, culture and area around the world. This is an analytical study on development and challenges of leadership in modern era. This paper will describe the basic concept of leadership style, chronological development of future leadership, prospect and challenges of leadership, leadership aspect and practice in twenty-first century.

Leadership Concept, Development and History

The concept of a leader was then associated with the concept of a hero, as seen by the achievements of Alexander the Great, Napoleon, and others. Around 1840, the Great Man Theory evolved as the first non-scientific concept of a leader. Over the last two centuries, researchers and institutions have theorised the concept and attempted to explain it scientifically.[14] As the industrial revolution progressed, the emphasis on leadership shifted to the psychological attributes of individuals who led but did not follow. Following that, leadership theories focused on behaviours and situations.[15] The term "leadership" is assumed to have arisen in the 18th or 19th centuries, whereas the word "leader" was used as early as the 1300s. According to a LinkedIn article on leadership, the term is derived from the Old English word "laedere," which means "the one who leads," with the noun "laedan" meaning "to guide or bring forth."[16] The concept of leadership, on the other hand, existed long before Old English was spoken and has often been associated with religious, political, and military personalities. Today, leadership is frequently thought of in terms of business and management, and it is used to define those who influence, inspire, and motivate within organisational settings. Meanwhile, psychologists, philosophers, and other experts continue to examine leadership and its various theories. A leader may be deemed a leader because of a formal relationship established by the possession of managerial status in an organisation.[17] A leader can also be informal, someone who steps up and provides advice from within a group of people, not necessarily the person who has decision-making authority. (As we'll see later in this lesson, not every leader is a manager, and not every manager is a leader.)

Those are some fundamental ideas regarding leaders and leadership. How did we get to where we are today in terms of leadership? It's been a wild ride historically. Let's go back in time and see how far we've come. Because we're primarily addressing a US-based readership, this article will concentrate on European and North American history.[18] Of course, there is a considerably longer and more diverse history of international leaders not mentioned here. Simply put, "leadership" is defined as "the ability to lead," which is not very useful. A better definition comes from the BNET online Business Dictionary: "the ability to establish direction and to influence and align others towards a common goal, motivating and committing them to action and holding them accountable for their performance."[19] While this is more descriptive, it is not substantial. It does not tell us what leadership is, but rather what it does. Honesty, Competence, Forward-thinking, Flexibility, Inspiring, Accommodative, Intelligent, Fair-minded, Broad-minded, Courageous, Straightforward, Imaginative, Innovative, and so on are some leadership qualities. Any leader should be a member of the group. This naturally promotes cohesion and collaboration. Workers or subordinates are more productive and multiplying when they are in a "positive work environment," and the attitude and influence of the boss or leader is a big component in this productivity.[20] The United States Army has 11 Leadership Principles:

➢ Be practically, tactically and technically skilled
➢ Know yourself and strive for self-improvement
➢ Know your soldiers and watch out for their well-being
➢ Keep your soldiers informed
➢ Set a good example
➢ Ascertain that the task is understood, monitored, and completed
➢ Train your soldiers as a unit
➢ Make sound, timely and purposeful decisions
➢ Develop a sense of accountability among your subordinates
➢ Employ teams or followers in accordance with its capabilities
➢ Seek and accept responsibility for your actions

Human history is packed with leaders, from Alexander the Great and Napoleon Bonaparte to Abraham Lincoln, Winston Churchill, Mahatma Gandhi, Nelson Mandela, Martin Luther king Jr, and yet the concept of leadership continues to spark debate and study as people strive to grasp what leadership truly is. One of the most visible characteristics of a leader is the ability to disrupt the status quo. Managers handle the given circumstances, whereas leaders question the status quo and create new ways/avenues to execute the same task. Leadership must originate from within and is based on your personality. Leaders have existed throughout history.[21] We are social animals that bond with one another, but we seek order in the midst of life's chaos. We want to be organised in order to accomplish goals as a society that we cannot do individually. As a result, someone will inevitably find up in command.[22] Leaders in the past have often belonged to one of three categories: political, military, or religious.

➢ Political: Around 1790 B.C., Babylonian ruler Hammurabi wrote the laws that unified his empire in what was viewed as a fair system because all people were subject to the same regulations.

➢ Military: Sun Tzu was a Chinese military general from 500 B.C. He wrote the Art of War, and while he was a great military leader, his book is essentially about how to employ armies only as a last choice, focusing more on prudent political policies and techniques to avert war.

➢ Religious: Religious leaders have had the biggest impact on their civilizations, with long-lasting consequences.

With the emergence of the industrial revolution, a new type of leader emerged: the economic leader. The so-called Captains of Industry discovered that they could construct an empire using modern technology rather than swords. Oil barons, railway magnates, and manufacturing owners amassed vast fortunes without the aid of armies, sometimes at the expense of the workers they employed.[23] This gave rise to Union leaders and diverse initiatives aimed at promoting justice in areas where abuses were thought to prevail. The Industrial Revolution also boosted the number of Scientific Leaders since scientists now had easy access to a wide range of new materials for their study. Psychiatry and psychology rose to prominence with research on workplace productivity and the impact on the workforce. Studies have consistently demonstrated that workers are more productive when they are in a "positive work environment," with the attitude and influence of the boss playing a significant role in this productivity.[24] Employees who believe they are listened to, respected, and treated fairly are happier at work and perform better than those who feel disrespected and unappreciated. The most well-known leadership theories are discussed below in briefl.

➢ **The Great Man Theory.** The original leadership theory was known as the great man theory, which pointed to notable historical characters such as Alexander the Great and Genghis Khan and stated that some people were intrinsically leaders, holding greatness and even divine or fated destinies.[25] At the time, the US population was only about 17 million people. Karl Marx was producing crucial work in Britain, which had just defeated China in the Opium War. Thomas Carlyle (1795-1881), a Scottish philosopher, developed the Great Man Theory, which asserted that leadership cannot be taught. Rather, there are born leaders (and thus born followers). As you might expect, leaders were thought to be males rather than women.[26] Gender equality was not on most people's minds at the time given that it was still a time of slavery. This hypothesis most certainly sowed the roots of fascist ideals in persons like Adolf Hitler, who spoke about "Ubermensch" (supermen) in his eugenic writings. Regardless, the Great Man Theory is no longer in use. The Great Man Theory gave way to behavioural science theories. It's easy to be inspired by stories of great men and women who accomplished amazing things in their lives. Alexander the Great conquered the known world.[27] Genghis Khan then ruined the majority of it. Abraham Lincoln freed the slaves. Harriet Tubman's Underground Railroad liberated hundreds from enslavement. Mother Theresa helped and consoled hundreds of people in Calcutta who had been abandoned by society. According this theory, these people accomplished great achievements because they were simply excellent people defined by fate and fulfilled their destiny.[28]

➢ **The Trait Theory.** Trait theory is an outgrowth of the great man hypothesis that highlights the personality qualities that exceptional leaders possess. Philosophers like Thomas Carlyle popularised it in the nineteenth century. "Great leaders are born, not made," as the saying goes, and Trait Theory takes this to heart. If you have the talent to lead, you were born with it; there is no way to master those skills. This thesis expands on the Great Man thesis by explaining what makes great leaders great. Then followed the Great Depression (1929-1939), during which the Nazi party in Germany ascended to power. This resulted in the Trait Theory, which was similar to the Great Man Theory but placed a greater focus on well-defined features. Motivation and ambition, self-confidence, integrity, energy, flexibility, intelligence, and other traits associated with leaders are some of the criticisms levelled at this idea.[29] The major issue is that leaders are supposed to be born rather than made.[30] In fact, the trait theory was largely abandoned as new theories were developed, particularly following leadership research conducted by Ralph Stogdill, a psychologist who discovered that leadership traits varied greatly and that someone who is a leader in one situation may not necessarily be a leader in another - it paved the way for a better understanding of the characteristics and behaviours that the best leaders today demonstrate.[31] Today, we recognise that effective leadership appears to be a combination of these beliefs - and more. As we've seen, there are many different types of leadership abilities. Everyone has some skill in one or more of these categories. This indicates that given the right circumstances, anyone may rise to a leadership post and be successful based on the leadership style that best matches their personality if they know how to use that skill to correctly address the problem at hand. Other leadership skills can be learnt, developed, and mastered.

- ➤ **Behavioural Theory.** Much of today's understanding of leadership has been influenced by behavioural theory. It implies that people may learn the behaviours required to be great leaders, and research in this area has contributed to a better understanding of diverse leadership styles. The Blake and Mouton managing Grid, which examines behaviours to establish a person's managing style and competences, is an example of this theory's influence. This period began with World War II (1939-1945) and the subsequent establishment of the United Nations.[32] This age gave birth to behavioural theories of leadership, which challenged the concept that leaders are born rather than made. They imply that leadership may be learned. In the 1950s, University of Michigan researchers published research on interviews they did with highly adept and ineffective personnel, and discovered two themes in leaders' actions. Leaders were either a) concerned with their subordinates' well-being or b) preoccupied with getting the job done. The former leaders had more productive employees than the latter. This resulted in the creation of Blake and Mouton's Managerial Grid (1964), which may be used to plot distinct leadership styles. They employ measures of care for people vs concern for production. Keep in mind that cultural considerations may vary. Leaders in the United Kingdom may be considered caring if they assist their subordinates with tools, as opposed to Japanese leaders who may assist their subordinates with personal difficulties. As a result, the notion is applicable throughout cultures, however exact behaviours may vary substantially.[33] Kurt Levin and RensisLikert were writing about participatory leadership about the same time that behavioural theories were taking off. This entailed involving workers in decision-making. The researchers basically stated that there is a range between autocratic decision-making and absolute delegation to subordinates. People will be more collaborative and dedicated when they are participating in decision-making, and better conclusions may be reached when more heads are brought together.[34]

- ➤ **Contingency theory.** This theory contends that effective leadership is dependent on a variety of conditions, with different leadership styles matching different leaders in different contexts. For example, psychologist Fred Fiedler proposed that there are two major criteria that influence whether or not a leader will be effective. Other leadership theories connected with contingency theories include situational theory. Some publications distinguish between situational theories and contingency theories, but I have yet to read a persuasive or logical enough description of how they vary. Furthermore, many sites use these names interchangeably or combine them, such as "situational contingency leadership." Don't get caught up in the terminology. The diagram below depicts Paul Hersey and KennethBlanchard's situational leadership concept. Employee "readiness" (i.e. willingness + ability) determined which leadership style to apply, among directing, coaching, supporting, or delegating (other sources use various terminology for this). For example, if workers are willing but unable to perform, a leader may need to teach them; if they are able but unwilling, a leader may need to assist them instead. Another well-known leadership paradigm is Robert House's "Path-Goal" Theory (1971). He contended that leaders direct followers so they know where to go, remove obstacles (as the leader deems fit, depending on the occasion), and reward followers for their performance. In this approach, the leader's effectiveness is determined by their leadership style, as well as the personalities of the scenario and the followers. At first glance, Fred Fiedler's Leadership Contingency Model (1967) appears perplexing, yet most of it is just fancy language for otherwise straightforward notions. Fiedler introduced the term "least-preferred co-worker" (LPC) to identify whether leaders are more concerned with people than tasks.[35] LPC is based on ratings of how difficult someone is to work with. The ideal technique is based on a combination of solid leader-member relationships, task structure (i.e. task standardisation), and position power (i.e. the leader's authority to judge and reward performance). Critics recognised many advantages and disadvantages in this theory (for example, the doubtful validity of LPC), yet Fiedler went on to refine his views. He developed the Cognitive Resource Perspective (CRP), which states that four things should impact how a leader leads his followers: 1) the competency of the group members, 2) stress, 3) experience, and 4) group support of the leader. In addition, he and other academics devised "leader-situation matching" training to assist leaders in matching their LPC score to the scenario. Although this hypothesis is complicated and somewhat dubious, there are over a dozen studies that show enhanced group effectiveness following such training.[36]

- ➤ **Situational theory or situational leadership theory.** Situational theory, often known as situational leadership theory. It is closely related to contingency theory and proposes that the context or circumstance in which a leader works will dictate the optimal leadership strategy to utilise in order to be effective. This leadership theory, also known as the Situational Leadership Model, was developed by behavioural scientist Paul Hersey and novelist Ken Blanchard, and contends that there is no one-size-fits-all approach to leadership.[37] Instead, the theory claims that the circumstance or environmental elements will decide the most appropriate and effective style for a leader to utilise, and that a leader's style should be adaptable to multiple situations and contexts. This idea is closely related to the path-goal leadership style.

➢ **Transformational Leadership.** While researching political leaders in 1978, James MacGregor Burns established the concept of transformational leadership. Burns proposed that "transformational leadership" is a process in which leaders communicate with their followers and encourage each other to progress together. His qualities and behaviours revealed the distinctions between "management" and "leadership." People and organisations are transformed as a result of the leader's leadership style and abilities, who are able to transmit a vision and direct the transformation. In 1985, Bernard M. Bass expanded on Burns' transformational leadership theory by moving the focus to the followers. The ability of the leader to influence the feelings, attitudes, and dedication of their followers is more important than the leader's unique attributes and vision. As we have previously discussed in productivity studies, if followers believe they can trust a leader (or, even better, if they adore a leader who can inspire a sense of devotion and respect), the followers will cheerfully go above and beyond what was initially asked of them. As a result, productivity and unity rise. A charismatic, motivating leader transforms the following.[38] Less than a decade later, leadership studies researcher Bernard Morris Bass turned the focus of Burns' theory to followership and how leaders should enable their followers to produce transformative influence. Transformational leadership ideas, such as those proposed by Bass and Burns, are particularly popular in the technology industry and other inventive businesses. Transformational leadership is markedly different since such leaders attempt to influence followers by appealing to intrinsic motives (e.g., with intellectually interesting or joyful job). For example, they aim to motivate and respect their employees. It may appear to be a simple notion, but James Burns first suggested it in 1978. He defined transformational leadership as an ongoing process in which leaders and followers mutually enhance one another.[39] As a result, leaders wield power through the use of their charisma. Bernard Bass claimed in 1985 that leaders transform followers by appealing to their higher-order desires, improving followers' sense of task performance, and emphasising team/organizational goals over personal ones.[40]

➢ **Transactional leadership theory**. It views leader-follower relationships as an exchange and is popular in highly hierarchical organisations that place a premium on processes and performance. It is also known as leader-member exchange hypothesis.[41] Tightening market circumstances in the late 1970s resulted in significant changes in market structures and markets, and the Cold War ended in 1991. Around this time, George Graen contributed to the development and popularisation of the Leader-Member Exchange (LMX) Theory, which emphasises the mutual trust, respect, and commitment that leaders share with their followers. Using these variables to analyse the relationship, followers are categorised as members of the leader's "in-group" or "out-group," which may have bad consequences for people in the out-group; but that's office politics.[42] Regardless, research has shown that high-quality LMX leads to improved job satisfaction, productivity, retention, promotion rates, and even compensation. This type of leadership employs contingent benefits (i.e. performance-based compensation), and leaders influence followers by appealing to their extrinsic motivations, which is why it is referred to as transactional leadership (the relationship is like a transaction–you work, and I'll pay you for it).

The concept of charisma (a term coined roughly a century ago by German sociologist Max Weber) acquired prominence and relevance throughout this period. House (the aforementioned path-goal theorist) and his colleagues have conducted substantial research on charismatic leadership. As demonstrated by characters such as Martin Luther King Jr. and Nelson Mandela, as well as Adolf Hitler and Joseph Stalin, such leaders may have a significant influence on their followers. Many scholars (including Bass from the previous paragraph) have discovered that charismatic/transformational leadership can be trained. Though the term "charisma" has been defined in numerous ways (sometimes to the chagrin of critical academics), the leadership observed in this age clearly persists to this day.[43] I hesitate to call this the "post-transformational" or "post-charismatic" period, yet it is the phrase used by many experts in the leadership literature to describe the modern day. Many argue that this is an era of authenticity, with leaders like Bernie Sanders and Donald Trump (both regarded charming in their own ways) offering refreshing contrasts to their predecessors in the same political setting. Others have attempted to use personality psychology to identify ties to leadership (for example, the famous "Big Five" typology has been researched, and it appears that only extroversion predicts leadership). Researchers are also emphasisingorganisational structure in leadership, such as shifting from bureaucracies to more team-based structures however this is much easier said than done.[44]

Theorists' studies of leadership, as well as the evolution of leadership theories, have tremendously influenced and expanded our understanding of successful leadership in the twenty-first century. Modern leadership styles respect traditional leadership talents such as confidence and strong decision-making, but they also emphasise leadership attributes and styles such as authentic leadership and servant leadership, with a focus on life-long, ongoing leadership growth.

These styles recognise that a competent leader can do the most challenging tasks of their work, such as making difficult decisions and performing evaluations, while also demonstrating humility, emotional intelligence, and adaptability. Another essential aspect of leadership is how it reacts to change (such as the structural change discussed before). Many theorists such as Dunphy and Stace in 1993 have developed change management models, however changing well-established routines and customs can be challenging for even the most charismatic leaders. The Dunphy and Stace model, for example, implies that there are various change tactics to choose from, but this says nothing about workers' apprehensions or resistance to such change, making the model overly optimistic.[45]

Barbara Kellerman stated in 2012 that followers are more essential than ever before, and the importance of leaders has never been lower. Whether you agree with her or not, we all know that the reactions of employees are the most important aspects in the success of a change programme. Indeed, when it comes to leadership, there is now a greater emphasis than ever on interpersonal ties within the organisation, which is definitely a positive thing for today's employees. It would take much more than a brief article to study every theory of leadership accessible today, but leadership has developed from a rudimentary idea of being a "born leader" to one that encompasses the relationship with the follower.[46] The question is no longer, "Can leadership be created?"However, "how can leadership be created?" Naturally, the answer varies on who you ask.

Many scholars have proposed various definitions of leadership over the years, and many have been effective. This accomplishment can be credited in part to the ability to relate the concept of leadership to present situations, which give multiple dimensions. As time and people progress, the concept of leadership evolves to reflect the most recent trends in human relationships and how they manage their members. Undoubtedly, the issue of providing a single simple definition of leadership that covers all attributes remains unresolved.[47] This uncommon condition has resulted in innumerable researches and studies conducted by scholars in creating plausible and tangible definitions of leadership that will stand the test of time. In general, a leader is defined as a person with authority who is appointed or acquires responsibility to manage an organisation, regardless of aptitude. More often than not, a leader is expected to provide leadership in carrying out duties and taking on responsibilities. In the organisation, the ability to manage the organisation is directly related with the role of leader. According to Stephen R. Covey, management is efficiency in climbing the ladder of success, but leadership determines whether the ladder is leaning against the correct wall.[48] In today's changing world, the manager and leader are the primary determinants of an organization's success. Williams described leadership as the practise of persuading people to attain collective or organisational goals.[49] This simply means that leadership is about setting direction and aligning individuals to that direction. Leadership is derived from a single word, leader, which means "a person or thing that leads." In this view, leadership might be described as the position, function, and capacity to guide others to greater achievement. Meanwhile, when considering the relationship between leadership and organisation, it is the ability of an individual to influence, motivate, and empower others to contribute to the effectiveness and success of the organisation.[50]

How does an Asian or Middle Eastern country appear in a vacation commercial? Perhaps the advertisement depicts images and notions of exoticism and seduction that convey a sense of geographical and historical distance. Despite the fact that such images have an antiquated feel to them, they are nevertheless widely used today, and these depictions can be related to a body of Western knowledge known as Orientalism. It created a specific vision of the East, known as the Orient, as a means of approaching it. Modern Orientalism was conceived during Napoleon's expedition to and invasion of Egypt in 1798. In addition to his troops, Napoleon had brought with him civilian professors, scientists, and researchers who would create a 23-volume encyclopaedia about the country titled Description of Egypt. This group of researchers was in charge of defining Orientalism, and the "experts" on the East were known as Orientalists. This concept was built out by other colonial powers, most notably Britain during the nineteenth century, and was the lens through which the West viewed the entire Orient, which was regarded to comprise the Middle East, Asia, and the Far East. The resulting picture of the East was exotic, romantic, and irrational, and Eastern clichés found in travel journals, newspapers, and scientific publications began to proliferate. These portrayed the Orient as exotic and unfamiliar; as a weird and foreign entity, regardless of country, people, or culture; and as a location where unseemly desires could run wild. Harems were seen as sites where the "lustful Oriental" could be discovered. Finally, the inhabitants of the Orient were viewed as irrational and incapable of rationality, with the idea that the opposite of these attributes were considered Western traits.[51]

When it comes to 19th century warfare, Carl von Clausewitz's On War is a must-read. This book is broken into four pieces. The first portion deals with defining war, the second with theory and criticism, and the third and fourth with strategy and tactics. According to Clausewitz, war is essentially a massive duel. He also compares it to a wrestling match, in that we have two forces striving to bend the other to their will. Both sides want to get to the point where the other can't fight any longer. Most of the time, this means that the goal is to disarm the opponent.[52] The goal of war is realised by violence. Today, we have culture wars, information and technology battles, but in the framework of the early nineteenth century, war is by definition violent. It achieves its objectives by the use of physical force. For the most part, we're still talking about two armies, with columns of soldiers, clashing on a battlefield. This brings us to our first moral quandary. The author is interested in investigating the moral dilemmas of war at every turn. And right away, we're confronted with a difficult question. Assume we accept that war is inherently violent. Even back then, some people believed that a war could be won with minimal bloodshed. However, the author is not convinced. In fact, he warns that such a strategy would most certainly backfire.[53] If we want to disarm our opponent and bend their will, we must use all of our physical force. The author believes that the concept of moderation in war is ludicrous.

Clausewitz continues to define war in new ways. He emphasises that war is not a single conflict or event. Every war has a backstory of events and political decisions that lead up to the conflict. As a result, we can consider war as a matter of reciprocal actions. This means that one side is reacting to the other at all times. Each party must make decisions on how to best respond. But, for the most part, there will be an escalation during this process until war is declared and one side is disarmed. It's crucial to remember that the outcome of a conflict is never the last word.[54] Even if we disarm our opponent today, that doesn't mean they won't re-arm and assault us tomorrow. In fact, whatever antipathy they had against us previously may have paled in comparison to the rage they feel after being vanquished.[55] This rage and fury should not be underestimated. Such spiritual incentives can be a deciding factor in a military's effectiveness. This returns to the author's conviction that war is a matter of deploying maximum force. It just doesn't make sense to leave our opponent well-armed and capable of restarting their attack. This also touches on another essential aspect of war: the unknown. Some credit Clausewitz with popularising the concept of the 'fog of war.' Indeed, neither opponent knows the entire extent of the other's weapons, position, or number of soldiers in reserve. As a result, commanders are frequently compelled to make judgements based on insufficient information. This fact can also be used to support the assumption that, as a general rule, one employs their greatest power.

The lack of complete information also plays a significant part in selecting the attributes that create the best military commanders. The question is what makes someone a military genius? While it should go without saying that a leader must be knowledgeable and understand human behaviour, he or she must also be able to face the physical dangers and suffering that come with combat. He views battle as a huge conquest over the unexpected, and as a result, he considers courage as a vital trait of a great leader.[56] Courage is displayed not just in the face of physical danger, but also in the face of moral responsibility while making difficult decisions.[57] When faced with the unexpected, one must be both firm and resolute, as well as cool under pressure. In other words, a great commander must have a constant mental presence. All of the characteristics of war, such as danger, pain, chance, and the unknown, can lead to a mind plagued with uncertainty, which is the worst thing a military commander can have. Leaders must also deal with what the author regards as the basic friction of war. As a result, while the goals of war are usually clear, achieving those goals is sometimes quite complex. This is one of the last points he makes in the first segment. And it's a fantastic note to end on as we begin the second chapter. In many respects, war is straightforward. Like a wrestling match. However, it is immensely complex in other respects.[58] Military leaders in the nineteenth century saw war as an indefinitely intricate wrestling match.

The 21st century General claims to give a new viewpoint on command, claiming that a major shift in command from an individualistic to a collective practise has occurred since the twentieth century.[59] The most hopeful assessment of pooled quantitative and anecdotal information on the current level of military morale is unsettling. Over the years, measures of trust, dedication, and morale have revealed localised issues. The current confluence of organisational and environmental stresses, on the other hand, poses institutional response problems of a new order of magnitude.[60] A solid employment market for officers leaving the service, the lack of a clear military danger to the United States, increasing aspirations for a "decent family life," and reduced tolerance among bright young people for poor leadership climates combine to form a lethal combination.[61] The crux of the problem appears to be evident. It is a story of dedication and commitment that has resulted in local miracles while effectively disregarding and jeopardising the institution's future. The military culture encourages a forceful response to policy efforts without regard for the collective long-term ramifications of such a response.

Excessive attention on the immediate (non-tactical) purpose, combined with institutional processes that pander to visible short-term results, pose significant obstacles to both current and future leadership.[62]

The goal of leadership in any Army, at any time, is to get the job done. Competent military leaders build trust, focus effort, define objectives, inspire confidence, build teams, set the example, keep hope alive, and rationalise sacrifice. There is minimal uncertainty regarding required leader qualities or behaviours for this century or the next.[63] Desirable attributes and skills may vary, but the underlying formula for leader success has altered little in 2,000 years. However, the strategy for habitually instilling, supporting, and sustaining the desirable leader behaviours has yet to be discovered. The relationship between concept and practise lies at the heart of the issue. Certainly, technical advancement has outpaced advancements in human systems design. In addition, heightened expectations about what constitutes good leader behaviour have emerged in all areas of American society over the previous 30 years.[64] Many studies have identified the key qualities for 21st century leaders in many socioeconomic sectors. They have typically included cognitive complexity, ambiguity tolerance, intellectual flexibility, a meaningful level of self-awareness, and an enhanced understanding of the relationships among organisational sub-systems that collectively construct the prevailing 'climate.' These would supplement timeless leader qualities such as integrity, high energy, courage, and commitment to institutional values.[65] Changing the culture of any organisation is a leadership effort, but there appears to be no comprehensive plan for changing Army culture. Despite the fact that we recognise that soldiers/sailors, not machines or structures, ultimately determine the outcome of battle, the development of technology applications and operational processes continues to consume a disproportionate percentage of the Army's creative energy.[66]

Understanding the changing roles of leaders in the future Army will necessitate an integrated and comprehensive programme of leadership study. Such a programme should reflect three areas, or foci, of leadership research: leadership models and theories; leadership tools; and leadership problems. The first two elements describe the infrastructure of leadership research tools and conceptual models or theories. Tools include measures of leader effectiveness, assessments of leader potential, as well as the characteristics that contribute to good leadership, training and development programmes, and leadership process aids. Theories and models are required to define how and when leadership is related to unit and organisational effectiveness, how and when leader qualities contribute to leader effectiveness, and how these leader attributes are best developed through programmatic interventions. Leader assessment tools aid in the validation of conceptual models. They also give a technique of validating the effectiveness of developmental programmes. Research on leadership ideas and methods is important, but not sufficient, to comprehend Army leadership in the twenty-first century. This research must also be used to better understand specific significant leadership issues in current Army issues that are projected to drive crucial processes in the future. Recent assessments on the evolving Army, as examined by Zaccaro, Klimoski, and Boyce, point to four significant issues that necessitate fresh research endeavours.[67] These are (a) leadership and change management, (b) leading in adversity, (c) retention of leaders and retention leadership, and (d) leader-led development of effective soldiers. An effective research agenda for future Army research must contain each of these dimensions: tools, theories, and models, as well as an emphasis on essential leadership issues. Prior leadership research, both in the military and in many civilian settings, has reflected one or at most two of these qualities. However, research that is truly useful for Army policymakers and stakeholders advances our understanding of effective leadership, provides measures and tools that can be used to validate leadership models as well as assess the effectiveness of leader selection and development programmes, and provides answers that resolve key leadership problems in the Army.[68] It is crucial to remember that leadership issues must be assessed in light of leader processes and the characteristics that contribute to the efficient execution of these processes. Furthermore, discovered features lead to the construction of assessment, selection, and development systems.

Military forces have a main responsibility in protecting and securing the nation from external threats, and a secondary role in assisting civil authorities when called upon. While the primary duty is to prevent, the secondary role is gaining popularity with a range of requests/tasks that plainly fall within the civil domain. Furthermore, the military forces are being pulled in as 'First Responders' due to the failure of other authorities and the public's lack of trust in them. Because the Army's mere presence benefits the environment, it is necessary for the Army to signal its presence in some way in marginal areas. Military professionalism and behaviour is a wonderful morale booster for the country; this is the only organisation that works and has the trust of residents across the country.[69] Today, armed troops are becoming more involved in sports, environmental preservation, and other activities. Retired military personnel enrich it with their discipline, passion, and nationalistic mentality.

The armed forces have come to represent the actual spirit of the national constitution by sticking strictly to its key values. Currently, military forces are playing an important part in the nation's and its security demands.[70]

On the other hand, a recurrent thread in recent research on how the Army's future environment is anticipated to alter is the increase in velocity, uncertainty, complexity, and ambiguity (VUCA) that will challenge Army leaders. The bottom line is that the military must remain relevant anytime the nation requires them, and hence the Senior Military Leadership requires a good politico-military understanding and rapport in challenging situations. Cannon-Bowers and Salas (1998) recognised a few stressors as being typical of today's military operational environment after interviewing and observing Navy crews.[71] As an example:

➢ Various information sources,
➢ Incomplete and contradictory data
➢ fast altering,
➢ Changing circumstances,
➢ a prerequisite for team cohesion,
➢ adverse physical conditions,
➢ performance pressure,
➢ Time constraints,
➢ heavy work/information load,
➢ auditory overload/interference,
➢ The danger.

There are basic disparities between the civilian and military sectors that have a direct impact on leader selection and growth. For starters, there is only one American Army. One cannot transfer out of that army without also abandoning the institution. The executive who is disgruntled at GM might find equivalent work at Ford.[72] However, an Army officer who grows dissatisfied with his work must either bear it or leave the service. Second, an employment contract with Sears or GE does not imply an implied obligation to endanger one's life to achieve corporate objectives. There are no contracts with limitless liability in business organisations. Third, the military leader-follower relationship is backed by law, custom, and local regulations. Fourth, all top military officers have been promoted from within the organisation. Philosophical focus and common endurance of adversity in the military produce interpersonal relationships that are rarely found in the business sphere. There are, however, two sides to close bonding within a strong culture. One side delivers fantastic team efforts towards the purpose, while the other takes a conservative approach to institutional transformation. While few institutions can be revitalised without huge external forces, strong authoritarian cultures have the capacity for substantial directional change if the collective leadership is so inclined. One example of such shift is the integration of minority members into the United States Army.[73]

The warrior ethic, which is essential as a distinguishing feature of the profession of arms, can justify leader behaviours that are situationally unsuitable. The classic example is the authoritarian leader whose preference for centralised control leads to poor decisions since his manner denies him critical information. An principle long espoused by many respected senior Army officers, disagreement is not treason, has not entered the institution's fibre.[74] Leadership principles and lists of attributes and descriptions of needed situational behaviours will continue to flood the market, despite the fact that the fundamentals of leadership, which come from timeless human needs and aspirations, have altered little throughout recorded history. While research and their conclusions will give insight, our goal is to enter the twenty-first century with a good track record of practise, not merely a solid theoretical foundation. It is the record of practise to date that should give all of us who have participated some satisfaction as well as significant concern and resolve to do better.[75] Today, military leaders and their leadership styles must change to meet current difficulties related to sophisticated technologies. Today, all leaders must embrace digital and smart advances and incorporate them into their leadership styles.

Surprisingly, gender, race, age, and personality qualities have virtually little to correlate with good performance. What truly matters are certain key habits, such as staying physically healthy. In other words, what we do matters more than who we are. Again, these key habits did not emerge by chance. High performers consciously took them on. We must not confuse these habits with 'life hacks' or quick, magical adjustments that require no work to accomplish. Another characteristic that they share is their belief in their ability to conquer even challenging activities, such as large new projects at work or learning new languages. Again, this is not an innate feature; it is earned confidence gained through continuous practise. This is fantastic news for us since it suggests that we, too, may acquire confidence through practise.

With constant practise, we will obtain more knowledge, master more skills, and our confidence will develop, making it simpler to continue learning and growing. This cycle of continuous growth and self-improvement is the hallmark of high performance.[76] Leaders strive for peak performance through ongoing self-improvement.

Every person believes that he or she is smarter than a caterpillar. But has he/she given serious thought to what he/she wants to accomplish? Has he/she written out his/her goals? If he or she hasn't, he or she is not alone. Only 3% of Americans have written down specific goals. These are the ones who make their aspirations come true. Having clearly stated goals can help us keep focused on what we genuinely want to achieve. It will also keep us from becoming resentful in difficult situations or distracted when we should be knuckling down. We get direction when we have a precise aim with specific outcomes. We need to know exactly what we should do to reach that goal. Working for something we want generates energy, which motivates us to put in the effort. Setting realistic goals takes patience. We may believe that we do not have days, or even hours, to sit down and think about what we want to do in life. However, the time invested is rewarding. We will be more efficient if we have clear goals. They can save us up to ten hours every week that we can use for other purposes. We will use our time more strategically if we have clear goals and prioritise the steps we need to take to attain them. This will make us happier because we will be spending our time developing a life we truly want to live rather than becoming diverted by things that do not contribute to our objective.[77] A capable and successful leader can easily and clearly define his or her goals and persuade his or her team to work together in the right direction to achieve/accomplish those goals.

Personality disorders are a subset of disorders that reflect lasting and inflexible patterns or dysfunctional patterns of inner experience and interpersonal behaviour that endure over time and across contexts, as opposed to passing emotions or episodes of anxiety. Personality disorders typically appear in adolescence or early adulthood. Although genetic factors may be involved, they are thought to be the result of deeply ingrained, maladaptive attempts to meet emotional needs and navigate the world. Let's start with the ambiguity.[78] This term arose from therapists' perception that patients were on the verge of neurosis and psychosis. This concept has since been abandoned, but the name has remained. Borderline personality disorder (BPD) was first described in the 1930s and is now recognised as a distinct disorder affecting 1 to 2% of adults. BPD is a divisive diagnosis. Women are diagnosed at a higher rate than men. Some clinicians argue that it is overdiagnosed, while others completely overlook its shifting symptoms. Despite increased awareness in recent years, BPD remains highly stigmatised. Those who suffer from it are frequently labelled as manipulative, attention-seeking, or helpless. In reality, many people are simply doing their best to cope with agonising inner turmoil. BPD symptoms stem from an unstable sense of self. Without an inner anchor, BPD patients desperately seek external sources of identity and self-worth.[79] This manifests in a variety of difficult ways, which a balanced leader must manage.

It takes time for one worker to switch between multiple types of work. By utilising a division of labour, one worker can focus on one skill, and wasted time is converted into productive time. People are more likely to innovate when their entire attention is focused on a single task. Increased productivity is the result of innovation. The first fire engines were greatly improved when a boy used a string to open and close the truck's water valve. Obviously, the boy's job prior to this invention was to manually open and close the valve.[80] As productivity rises, there is often a surplus of unwanted products that can be traded away. For example, a butcher who has an excess of meat could exchange it for bread from the baker. The butcher can sell his meat to whoever is willing to buy it in the market and then use the money to buy bread from the baker. What if the butcher prefers cheese to bread? He can use the money he earned from selling his meat to go to the market and buy cheese. People can specialise in their respective crafts or fields in this manner, which is another type of division of labour. A division of labour increases productivity, which in turn creates a market where artisans can trade surplus produce.[81] Innovation makes a leader more appealing, colourful, and perfect. In this modern era, leaders are constantly striving to increase productivity.

There are probably a plethora of people who want to influence our behaviour right now: politicians, police, our doctor, our boss, our parents or our spouse, and so on. Although the methods used vary from threats and bribes to charm and deception, all attempts have one thing in common. They rely on incentives. An incentive is simply a method of encouraging people to do more of a good thing or less of a bad thing. Economic, social, and moral incentives are the three broad categories of incentives. The most effective incentives are those that combine all three types. Crime is one area where incentives are critical. People are frequently given opportunities to cheat, steal, and defraud, so it's worth investigating what incentives keep them from doing so.[82]

The risk of going to prison, as well as the associated loss of employment, home, and freedom, is all primarily economic in nature, and they certainly serve as a strong deterrent to crime. There is also a strong moral incentive, as people do not want to do something they believe is wrong. Finally, there is a strong social incentive, as people do not want to be perceived as doing something wrong by others. Depending on the crime, this can often be a stronger incentive than economic penalties. Most people are discouraged from committing crimes because of the combination of all three types of incentives.[83] Leaders typically use the perfect amount, time, and type of incentive in the perfect situation.

As humans, we are particularly adept at converting all of the stimuli or incentive in our environment into meaningful information. This is the ability that has allowed us to develop the scientific method, philosophise about the nature of being, and invent complex mathematical models. However, we can reflect on and order the world around us doesn't mean we're very good at it. Actually, our worldview tends to be limited. We tend to cling to our beliefs about how the world works once we've formed them. Again, because human knowledge is constantly growing and evolving, this dogmatic approach makes no sense. Just two hundred years ago, doctors and scientists were supremely confident in their knowledge of medicine, but today their confidence seems ludicrous: imagine going to your doctor complaining of a common cold and being prescribed snakes and leeches.[84] Being dogmatic about our beliefs blinds us to concepts that deviate from the paradigms we've already accepted as true. How can we understand medicine, for example, if we're unaware that germs exist? We may come up with a reasonable explanation for illness, but it will be flawed due to a lack of critical information. This type of dogmatic thinking can have disastrous consequences. We are sometimes surprised by events not due to they are random, but because our perspective is too narrow. Such surprises are known as 'Black Swans,' and they can cause us to fundamentally reconsider our worldview: Before anyone had ever seen a black swan, people assumed that all swans were white. As a result, all of their depictions and imaginations of the swan were white, implying that white was an essential part of swanness.[85] So, when they discovered their first black swan, it fundamentally changed their understanding of what a swan could be. As we'll see, black swans can be as unimportant as discovering that not all swans are white, or as life changing as losing everything due to a stock market crash.[86]

When our forefathers first attempted to describe natural phenomena in the usual world, they assumed it was the work of all-powerful gods. Today, physicists have a better understanding of what causes the sun to shine and rain to fall. And, by employing the scientific method and physical laws, they can rule out many of the paranormal phenomena that continue to captivate the popular imagination. Frank Wilczek, a physicist and Nobel Laureate, coined the term core theory to describe the fundamental laws of our universe.[87] The Core Theory explains how all known particles, such as quarks, electrons, and neutrinos, interact with one another and is affected by electromagnetism, gravity, and nuclear forces. It also includes the Higgs field, which is energy-field that gives all particles mass.[88] It essentially covers everything that affects our daily lives. It explains how light molecules interact with atoms or entire objects, and how a hummingbird can take flight and appear to hover in mid-air. Crossing symmetry, for example, allows us to rule out some of the fanciful phenomena found in popular science fiction, such as telekinesis and telepathy.[89] Crossing symmetry, among other things, indicates that the particle required for telekinesis does not exist; if it did, scientists would have discovered it by now. Since telekinesis is the act of using our minds to move objects, there must be some sort of particle that the mind can produce or manipulate to interact with the matter in the object.[90] Let's call it

Particle X, and according to crossing symmetry, it could be created when a proton collides with an antiproton. However, despite numerous experiments investigating these collisions, there is no evidence that Particle X exists, even under extreme conditions. This is the same process that allows us to rule out other paranormal abilities such as telepathy and levitation.[91]

Nowadays, even a child can tell you that smoking kills. However, this now-well-known fact was not so well-known in the second half of the twentieth century. It's hard to believe now, but many people were unaware of smoking's negative health consequences. But did the tobacco industry know about its product's dirty secret? Of course they knew. In fact, they knew smoking was harmful as early as the 1950s, when the tobacco industry was first scrutinised for the harmful effects of cigarettes. Recognising the need for action, the four largest tobacco companies in the United States - American Tobacco, Benson and Hedges, Philip Morris, and US Tobacco joined forces in 1953 to defend their industry. In 1979, the tobacco industry launched a programme that provided funding to prestigious universities such as Harvard. They committed $45 million over six years to prove that smoking was not linked to health problems. But they didn't just fund universities; they also hired a respected scientist named Frederick Seitz, who distributed the money himself, giving the tobacco industry even more credibility.

They even called scientists to testify in court that there was no link between smoking tobacco and poor health. However, the industry could only keep the truth hidden for so long before people caught on.[92] Finally, the truth is revealed, and that is reality. Truth remains universal truth. Nobody can put a stop to it. No one wants to be labeled a liar, and while most people would never tell a big lie, many tell small lies that they believe are insignificant. The majority of people avoid telling big lies because of the potentially disastrous consequences. Such lies can ruin a person's life or even throw entire societies into disarray.[93] Despite the negative consequences of big lies, governments and the media continue to spread them. This has resulted in widespread mistrust of world leaders on a global scale. For example, the Bush administration claimed that Iraq was hiding weapons of mass destruction, which turned out to be false.[94] Many people became skeptical of US foreign policy as a result of this obvious deception. Again, small lies may have less of an impact than big lies, but they can have disastrous consequences in the long run.[95]

We all remember the global financial crisis that engulfed the world in 2008. We may also recall that in the months that followed, economists were, aside from bankers, the most distrusted professionals in the world. This backlash, however, was far from unfair to economists; it was a perfectly reasonable response to their arrogant attitude in previous years.[96] Simply put, economists had grown far too big for their boots. One sign of economists' arrogance was their belief that only they could fully comprehend the complexities of economic theory. This led them to dismiss any criticism of their beliefs as overly simplistic. However, this was and is not the case. Instead of being too complicated for outsiders, 95% of economics is simple common sense. We can think of it this way. Even if you are not a qualified epidemiologist, we know what standards of hygiene we expect when we go to a restaurant. The same can be said for economics; the fundamental principles of the subject are understandable to anyone. After all, we don't need to be the president of a central bank to understand that a country shouldn't bet all of its money on risky investments. This arrogance also led mainstream economic teaching to dismiss any alternative theories. For the last few decades, one economic theory has dominated: neoclassical free market theory.[97] This belief holds that every individual in society acts as a rational, selfish agent who only makes economic decisions based on how much it will benefit them. The economic profession came to regard this theory almost as a natural science. As a result, they focused too much on a normative theory rather than its application in practise. However, unlike physics, economics is a social science. This means that there are numerous potential alternative theories, each of which is just as tenable as the free market approach. We will discover the central flaws in free market economic theory in this manner.[98]

In fact, the financial system is evolutionary in nature. Charles Darwin discovered that life evolved through a process known as natural selection. Those life forms that were best suited to their environments thrived, while those that were less successful died out. In most environments, there are only enough resources to support a limited number of people. The competition for these resources is fierce, as failure frequently results in extinction. The most prosperous life forms were able to spread their genes through reproduction and thus multiply in number, eventually taking the place of the declining species. The process is ongoing; species are constantly dying out and being replaced by new species. These changes are usually limited to small areas, but occasionally large-scale extinctions occur. A meteor 64 million years ago wiped out almost all life on Earth, including most dinosaurs. In such circumstances, new species will emerge to fill the voids left by vanished ones, just as mammals did after the meteor disaster. The financial system evolves in a similar way, through market selection: the financial equivalent of natural selection. The financial world, like the natural world, is constantly evolving through new techniques and innovations. Firms that adapt to these new circumstances thrive and are imitated by others. This is the monetary equivalent of gene reproduction. Firms that cling to outdated practises and fail to generate adequate returns, on the other hand, are doomed to extinction. Some events, such as the 1929 and 2008 financial collapses, result in the mass extinction of financial firms and practises. In situations like this, room is created for new types of financial firms and practises to emerge.[99]

Motivation can be divided into three categories like play, purpose, and potential. Play motivates us to take action simply because it is enjoyable. We may be inquisitive and enjoy experimenting, or we may simply be eager to learn or adapt. That is why people spend time doing things like crossword puzzles or listening to music. However, if we're trying to do something difficult, such as lose weight, play motivation can help; we might enjoy trying new recipes or researching vegetarian restaurants to reach our goal. Purpose motivates us to do something because we value the outcome and impact of our actions, even if the process itself is unpleasant. Long shifts and stressful days as a nurse, for example, may be challenging, but we value caring for people deep down. Potential motivates us when we value the indirect outcomes of a particular activity. In essence, we believe that our actions will result in something significant, such as achieving a long-term goal.

If we were a paralegal, for instance, we might not enjoy the day-to-day work, but we see it as a necessary step towards applying to law school. So, those are the three types of motivation. The more closely these three are linked to the work we do, the more strongly they will influence our overall performance. Play is the most powerful motivator of the three because it is the most similar to the work itself. This means that the more we see our work as play, the better we'll perform! However, purpose and potential should not be overlooked; they remain powerful motivators or incentives.[100]

In many cases, politicians and campaigners begin with the best of intentions but they end up by making matters worse. Interestingly, this can happen when their policies are motivated by emotions and moral outrage rather than logic. If someone did exceptionally well for themselves, it had to be at the expense of someone else. The zero-sum fallacy is at the heart of some well-intended but ultimately harmful economic policies. Take over rent control. People who believe in zero-sum transactions believe that renting is a transaction in which one side always profits: the property owner. As a result, they argue, there must be some form of rent control or rent protection. It's been done before, and landlords and builders almost always find the terms unacceptable. This means that landlords will stop renting and builders will stop building. People who need to rent will suffer as housing becomes scarce. For example, when the Australian government implemented rent controls after WWII, not a single new apartment block was built in Melbourne for years! People who believe in a zero-sum economy cannot see renting as beneficial to both parties. Their actions may be counterproductive. International trade is another area where the zero-sum fallacy appears. Some believe that the "winners" are always rich, developed countries, while the "losers" are poorer, less developed countries. They feel that more powerful countries have gained from the weakness of their weaker neighbours. Those who believe this, on the other hand, are allowing sanctimony to cloud their judgement. Above all, they fail to recognise how trade has brought prosperity to many of these poorer countries. South Korea, Hong Kong, and Singapore have only thrived since they opened themselves up to investment from wealthy Western countries. The outcome was anything but a zero-sum game: both parties appear to have benefited greatly from the exchange.[101]

Classical economists argue that a worker's wage reflects the value they bring to a company. They believe that if a company decides not to hire someone, the company's loss is equal to the wage that the worker would have received. In other words, they believe that a worker's contribution to the value of a company is directly related to their pay. The second assumption of classical economics is that a worker's wage is the lowest amount for which they would be willing to work. This is frequently regarded as an equilibrium point where labour demand meets supply. However, Keynes criticised these assumptions because they failed to account for a significant real-world phenomenon: involuntary unemployment. Keynes pointed out that there are situations in which workers are both willing and able to work at the current wage, but they are unable to find work. Traditional economists typically argue that this is a form of voluntary unemployment because they believe workers are simply refusing to work for lower wages. They believe that high unemployment during economic downturns is caused by workers' refusal to accept wage cuts. Keynes argued that the unemployment rate can fluctuate significantly without corresponding changes in workers' wage demands or productivity. This suggests that there are other factors influencing the unemployment rate, factors that the classical theory does not fully account for. He believed that the assumptions of classical theory did not accurately reflect the complexities of the real world, particularly in relation to involuntary unemployment and workers' attitudes towards wages. His critique sought to expose these flaws and provide a more nuanced understanding of employment and wages.[102]

It's 1962, and a young, fresh graduate from Stanford Business School has an unusual idea that he can't shake. He plans to import high-quality running shoes made by a Japanese company, Onitsuka Tiger, to the United States. Buying these shoes to sell in the United States was met with scepticism from everyone around him, including his professors, peers, and even his own father. Despite the sceptics, he chooses to pursue his vision. So, fueled by unwavering commitment, he boards a plane to Japan, where he will present his audacious proposal to a panel of seasoned Japanese businessmen. It turns out to be a success, much to his surprise and that of others, and Onitsuka agrees to send him 300 pairs of shoes to help him get started. With that, the first leg of this young entrepreneur's journey begins, and in the months that follow, he finds himself selling Japanese shoes straight from the trunk of his car. This is the story of Phil Knight and the birth of what would become one of the world's largest brands, Nike. Nike is an incredible company with an incredible origin story. Let's look at the moment Nike went public. We need to highlight the risks, the rewards, and the unique strategy Phil Knight used to overcome his fear of losing control of the company. So, if we've ever weighed the pros and cons of taking our company public through an IPO and wondered how that might affect our core business values, or even what an IPO is?[103]

Advanced Technologies and its Impact on Leadership in Twenty-First Century

Industrial revolution is a global phenomenon and continuous process. AI is going to lead to a redefinition and a disruption of service models and products. Although the technical development leads primarily to an efficiency enhancement in the production sectors, new creative and disruptive service models will revolutionize the service sector. These are adapted with the support of big data analyses at the individual requirements of the client and not at the needs of a company. Chronological development of industrialization has been discussed below.

INDUSTRY 1.0: INDUSTRIALIZATION or Industry 1.0 is known as the beginning of the industrial age, in 18th century. For the first time, goods and services were produced by machines. Besides the first railways, coal mining and heavy industry, the steam engine was the essential invention of the first industrial revolution; steam engines replaced many employees, which led to social unrest. At the end of the 18th century, steam engine was invented and introduced for the first time in factories in the Great Britain and it was a great driving force for industrialization, since they provided energy at any location for any purpose.[104]

INDUSTRY 2.0: ELECTRIFICATION The second industrial revolution began at the beginning of electrification at the end of the 19th century. The equivalent of the steam engine in the first industrial revolution was the assembly line, which was first used in the automotive industry. It helped accelerate and automate production processes. The term Industry 2.0 is characterized by separate steps being executed by workers specialized in respective areas. Serial production was born. At the same time, automatically manufactured goods were transported to different continents for the first time. This was aided by the beginning of aviation.[105]

INDUSTRY 3.0: DIGITALISATION The third industrial revolution began in the 1970s and was distinguished by IT and further automation through electronics. When personal computers and the internet took hold in working life. So, from this age, global access to information and automation of working has taken placed. Moreover, human labour was replaced by machines in serial production. A process that was intensified in the context of Industry 4.0 was already in the offing at that time.[106]

INDUSTRY 4.0: AUTOMATIZATION The term Industry 4.0 means in essence the technical integration of cyber physical systems (CPS) into production and logistics and the use of the 'internet of things (IoT)' or connection between everyday objects[107]and services in (industrial) processes including the consequences for a new creation of value, business models as well as downstream services and work organization.[108] CPS refers to the network connections between humans, machines, products, objects and ICT (information and communication technology) systems.[109]Within the next few years, it is expected that over hundred billion connected machines will exist throughout the world. The introduction of AI in the service sector distinguishes the fourth industrial revolution from the third.

The term Industry 4.0 thus stands for the optimization of components involved in the production process (machines, operating resources, software, etc) owing to their independent communication with one another via sensors and networks.[110] This is supposed to reduce production costs, particularly in the area of staff planning, giving the company a better position in international competition.[111] Well-known examples from the field of robotics and AI are the so-called 'smart factories', driverless cars, delivery drones or 3D printers, which, based on an individual template, can produce highly complex things without changes in the production process or human action in any form being necessary. Well-known service models are, for example, networking platforms like Facebook or Amazon Mechanical Turk, the economy-on-demand providers Uber and Airbnb, or sharing services, such as car sharing, Spotify and Netflix. Studies show that merely due to sharing services the turnover of the sector will grow twentyfold within the next ten years. Old industry made progress by using economies of scale in an environment of mass production, but the new information economy lives on networking effects, leading to more monopolies.[112]

Now, AI has been around everywhere for a great deal of time. The benefit of AI is steadily improving our everyday life. The technology is being used for robots that welcome at shopping centers or online search engines for offering suggestions.[113]Today, AI simulates human analysis in AI systems. It is the ability of the computer program to think and learn. Everything can be taken to be AI, if it involves a program that does something and that we usually think depends on human intelligence. Innovations in the AI space have led to several benefits across multiple industries.[114]Today, processes are effective and efficient, convenient technologies are extensively available, and forecasts are more accurate.

AI and other technology experts are saying today, the rise of AI will make most people better off over the next decade, but many have concerns about how advances in AI will affect and what it means to be human, to be productive and to exercise free will. The automation revolution will have a tremendous impact on the fundamentals of business and society, as well as on the innovation and productivity potential. Blockchain technology has the potential to impact most industries across the globe in the near future[115]; heralding in a new age of consumer trust and optimization. AI can improve data backup and disaster recovery planning and policy from an IT standpoint to ensure smooth company continuity. The elements for successful technology and IT leadership continue to evolve, but the requirement for strong business strategy, vision, and IT management, as well as a knowledgeable approach to risk, compliance, outsourcing, and AI, remains as important as ever. [116]

Digital existence is enhancing human potential while upending long-standing human activity. More than half of the world's population now uses code-driven systems, which present both extraordinary potential and challenges that have never been seen before.[117] Will people be better off than they are now as algorithm-driven AI continues to spread? AI will have an impact on the entire agricultural and food value chain, from farm to fork, both now and in the future. Next-generation automotive technologies will be influenced by AI, and this will change how cars, trucks, and powertrains are designed and produced.[118] AI will influence the tech developments of the global aviation and aerospace sectors. It will also influence space travel and communications, airport operations and management, air traffic control systems, and future trends in flight and aviation transport related industries. AI will influence the technology innovation transforming all parts of the construction and civil engineering sectors leading to improvements in cost, safety, efficiency and quality of construction.[119] AI will have an impact on smart phones, tablets, and wearable tech gadgets, as well as how people live, work, and consume services, prompting businesses to establish their own methods for dealing with such use at the back end and capitalizing on it at the front end.[120]

The experts predicted networked AI will amplify human effectiveness but also threaten human autonomy, agency and capabilities.[121] Computers might be as smart as or smarter than humans when it comes to things like making complicated decisions, learning, reasoning, pattern recognition, visual acuity, speech recognition, and language translation. Smart systems in neighborhoods, cars, buildings, utilities, farms, and business processes will save time, money, and lives and give people the chance to enjoy a more personalized future.[122] The use of AI in healthcare is hopeful, with applications such as diagnosing and treating patients and assisting senior citizens in living fuller and better lives. They were particularly enthused about AI's involvement in broad public-health program based on vast amounts of data that may be collected in the future years on everything from personal genomes to nutrition.[123] AI would abet long-anticipated changes in formal and informal education systems.
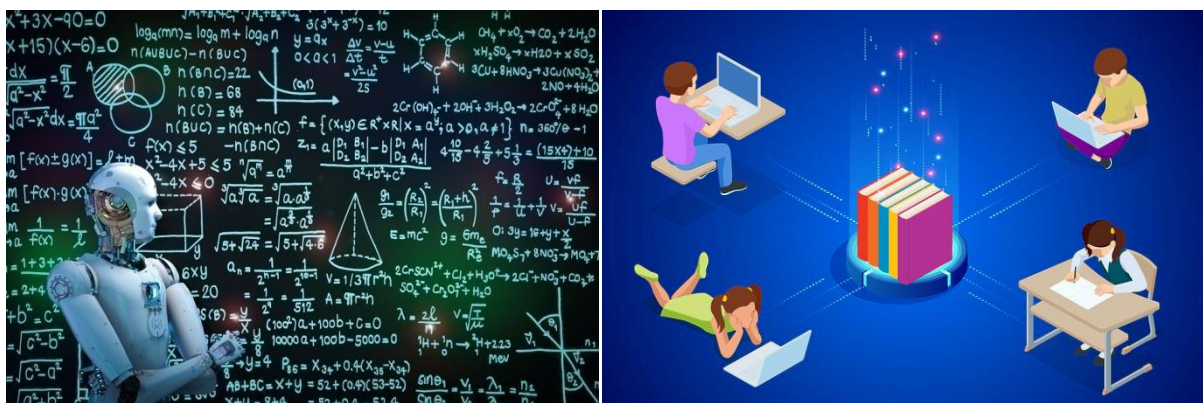

Figure 1: Role of AI in education system[124] and revolution of future education system[125]

Looking around now, we can see that our society is changing as a result of the use of AI and IoT in daily operations. If we go to a healthcare facility, an AI-powered machine will check our pulse, and if we go to an internet store, we will see a recommended list customized by an AI tool. Actually, these are only a few examples of the benefits of AI in our daily lives. AI will provide a lot more in the future. With time, more industries, service sectors, and organizations will embrace this transformative technology to improve every human activity working process.[126] AI can help simplify and speed up processes in the community, society, country, and world by making the workplace more efficient, helping us make better decisions, or giving us direct help. AI can help by finding and fixing problems that people might not be able to see or fix on their own. But some people don't see the benefits of AI because they think it will cause people to lose their jobs and become less smart. In fact, speed, precision, efficiency, and scalability are the most important benefits of AI.

The 4IR will transform industries, service and other sectors so significantly that much of the work that exists today will not exist in next 25 years. It is crucial for us to understand the impact of these changes on all areas of our lives, including academic and learning institutions.[127]Currently, all graduates are confronted with a technologically transformed world in which AI, IoT, ML, Big Data, Cloud and Edge Computing, and social media create diverse opportunities and challenges for conventional education systems. As students consider their post-diploma or post-graduation lives, formal academic and learning institutions are pondering their fate, particularly in regards to employment. Nearly all contemporary technologies propelled by AI are transforming the world to such an extent that social concepts such as 'post-work' are increasingly defining the present era. This period requires skills that are not identical to those required during the Third IR, when information technology (IT) was the primary driver. It is estimated that artificial intelligence will be a US$ 15 trillion industry within the next seven years. Millions of unskilled and traditionally trained individuals will be laid off.[128] On the other hand, millions of jobs related to modern and hi-tech skilled will be created in the next few years.[129]

Today, advanced technology like IoT is revolutionizing computing by introducing networked devices into our daily lives that acquire and analyze information to serve an ever-increasing number of services and human life. IoT makes other technologies smarter by enabling automation, personalization, and remote control via networks of Internet-connected sensors.[130] At the same time, IoT technologies raise significant privacy concerns, which may hinder their wider adoption. IoT applications range from smart homes and wearable gadgets to industrial automation, agriculture, healthcare, transportation, ecosystem, warfare, business, education, so on. The IoT has the potential to completely transform our lives by enabling smarter, more connected, flexible, more relax, and more efficient systems. IoT has the potential to develop industries efficiency, increase productivity, and improve our daily lives. IoT will influence more in technology, and more things will become internet-connected in future.[131] It is an analytical paper to depict the influence of IoT on technologies and devices in our usual life, business, industry and other sectors along with challenges and suggestions for best harvest in this modern era.[132]Throughout the world, billions of embedded internet-enabled sensors provide an enormous amount of data that businesses can utilize to improve operational safety, track assets, and reduce human operations.[133] Machine data can be used to predict whether equipment will break, giving manufacturers a heads-up and avoiding lengthy periods of downtime.[134]IoT devices can also be used by researchers to collect data, information, and other intelligence about client preferences and behavior, market demand, future requirements, potential risk, and so on. However, those may be serious implications for privacy and security.[135]IoT has the potential to develop industries efficiency, increase productivity, and improve our daily lives. At the same time, IoT will influence seriously to other technologies, and in future more things will be internet-connected. Today globally, there are around 17 billion active IoT devices, and more than 85% of firms have boosted their technical efficiency by implementing IoT technology into their products. The Internet of Things has been named 'the next wave of innovation' as its impact on people's day to day lives evolves.[136]In fact, IoT is critical for operating large-scale businesses and the service industry in the twenty-first century. Furthermore, it was shown that IoT has a considerable impact on decision-making and corporate operation management.[137]
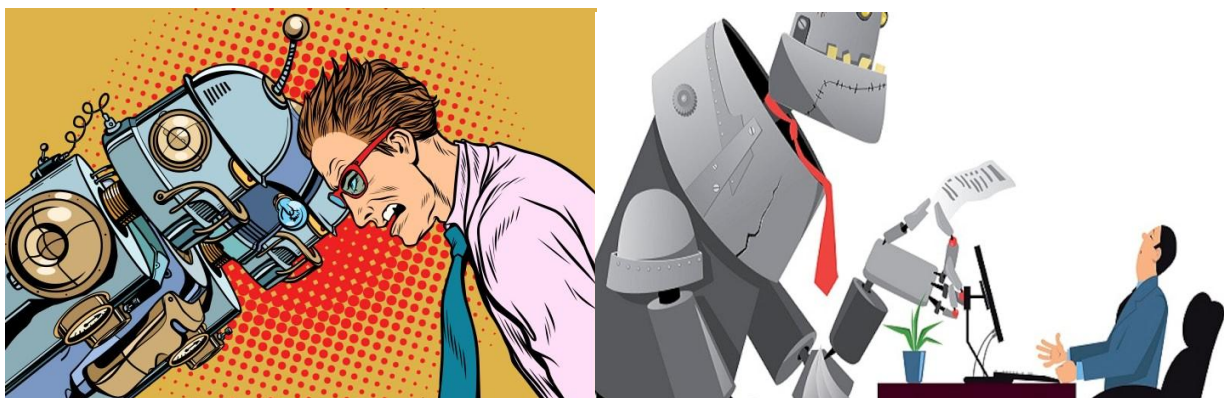

Figure 2: Machine vs human- who is wining?[138] Robot will outsmart human in near future[139]

The explosion of technology in the modern era has coincided with an equally seismic shift in how we think and talk about it. AI is so advanced technology that can replicate the human brain or intelligence. It allows computer programs to learn from experience through iterative processing and algorithmic training.

Every day, AI has become more practical and innovative in almost all aspects of life. AI has become a crucial issue in the modern era, as it might affect the job market and general employment. Most individuals wish to claim that the widespread usage of AI would result in employment losses for people.[140] However, People are gradually realizing that AI can improve the creative, lucrative, constructive, adaptable, and accessible nature of professions. AI could lead to a more innovative, diversified, and skilled economy.[141] We must need to change the education system, including the curriculum, teaching methods, and many things that need to be done for schooling. Our mass or general education system needs to be aligned with modern and advanced technology, which will change the whole school system and must be purposeful and sustainable for the long term. It is an analytical study in which the researcher has tried to evaluate the diversified use of AI and robots and the consequences for the human future, emphasizing the global education system. Robotics, AI, and machine learning have advanced significantly in recent years. Automation and extensive use of AI can help organizations, companies, or industries do better in production or service by reducing errors, improving quality and speed, accuracy and integrity, and, in most cases, achieving results that are impossible for humans.[142] Again, advances in AI and related automation technologies have led to growing fears about job losses and increasing inequality in society. This concern is widespread in high-income countries. Developing countries and emerging market economies should be even more concerned than high-income countries, as their comparative advantage in the world economy relies on abundant labour and natural resources.[143] Additionally, declining labour and natural resource returns, as well as the winner-take-all dynamics brought on by new information technologies, may lead to a further loss of control in the developing and labour-intensive world. This has the potential to slow the rapid progress made over the last fifty years. It may also jeopardize progress toward reducing poverty and inequality in societies around the world.

Future dangers from AI may be very significant. AI, IoT, ML, and automation will reduce the need for human workers and the size of the global economy. *AI in education is not about humanoid robots as a teacher to replace human teachers. However, it is about using computer intelligence to help teachers and students and improving and effective the education system.* In the future, the education system will have many AI tools that will shape the educational experience. Again, who knows, maybe even robot-human emotional relations will be possible in the future. There were already several movies playing with that idea. However, there is a high degree of uncertainty regarding the conceivable technological development scenarios and their effects.[144] So, substantial potential weaknesses and risks cannot be ignored. Economic analysis based on models suited to this new era has the potential to aid in the development of policies at both the global and national levels that can mitigate these negative effects. The big threat of AI is 'Singularity' in which AI machines take over and fundamentally alter human existence by making us dependent on them or eliminating us. This is another major threat to humanity on a global scale. Today many people believe that the end of humanity is possible if super-intelligent robots gain access to nuclear weapons or develop biological or chemical agents.[145] Those devastating/horrifying tasks could be carried out at any time, either by super clever robots themselves or by some ignorant human acting out of anger, malice, or dictated by a stupid person. So, there should be appropriate procedures, rules and regulations for using advanced AI and robots. And such procedures and regulations should include ethical, privacy, and security concerns. Therefore, global coordination should guide AI development in a positive, gentle path.[146] On the other hand, AI technology has the potential to give benefits to different income choices and bring significant gains to both developed and developing countries.[147] AI also has the potential to create new and innovative job opportunities, leading to a more productive and efficient economy.[148] Any technology usually eliminates employment that creates. It is the reality that, with the advancement of AI, the world will become more complex and self-centred in the future, as well as there will not be enough jobs for all, or it will not ensure employment for everyone. So, the new generation needs to be educated with advanced technology and valuable skills. Therefore, the current education system must be transformed with a pragmatic solution.[149]
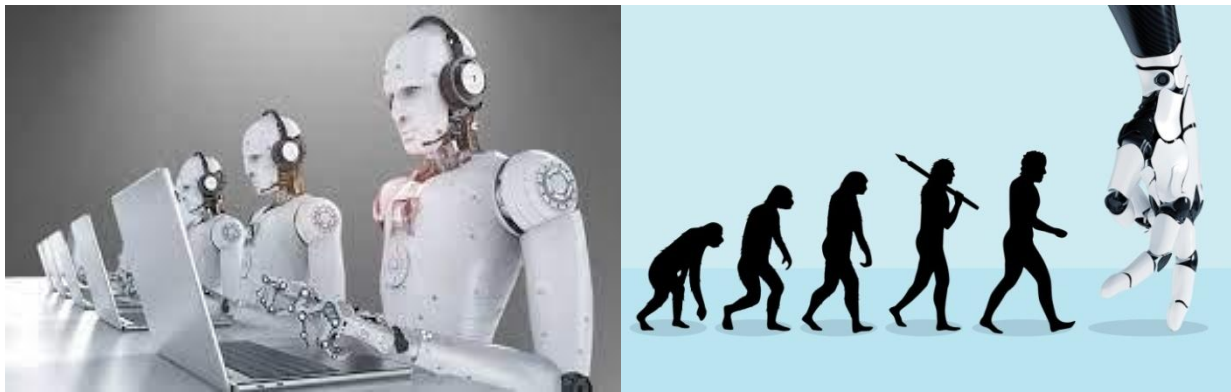
Figure 3:Machines may rule over humans in future[150]both certainty and uncertainty of life[151]

Digitalization and smart technologies are likely to change the way that modern leaders interact with their teams and stakeholders. Leaders will need to adapt to new forms of communication and collaboration to be effective and successful in this context. Now, the growing importance of diversity, globalization and inclusion in the workplace is significant.[152] It will require modern leaders to develop new intelligent, skills and strategies for managing and motivating diverse teams. This will require leaders to be more aware of and sensitive to the needs of team members and followers from different backgrounds, culture and area around the world. Globalization will necessitate effective connections with friend and foe as well as colleagues and stakeholders from different cultures, attitudes and backgrounds. They will also need an understanding of international markets and regulations. Leaders who are able to incorporate sustainable practices into their task, action and operations will be better equipped to compete in a rapidly changing world. It is really interesting is that, the value of global trade increased to a record-breaking US$ 7.7 trillion in the first quarter of 2022, according to the United Nations Conference on Trade and Development. Today, global trade includes the trade of goods as well as services.[153] Global leadership requires developing a global mindset. Global leaders are next-generation leaders who expertly navigate the international landscape, create cross-culture connections, and foster growth for businesses and communities around the world. Developing a global mindset and versatile attitude starts with the ability to communicate a clear vision, modern leaders need to think strategically, develop relation and inspire cooperation. To be a global leader, we must be able to navigate the challenges and harness the opportunities that arise within a dynamic, diversified, international ecosystem.

Technological advancements are enabling substantial changes in leadership content, delivery, and accessibility. New technologies have aided the exponential rise of human knowledge throughout history. Presently, an increasing number of software applications are establishing environments in which leaders can guide the development of their own knowledge and intelligent with minimal guidance from mentors or coaches. A potential benefit of digital and smart technologies is the potential for expense reductions. In the present scenario, the significance of advanced technologies is heightened as they strive to support overwhelmed leaders in implementing the forthcoming wave of assistive technology in near future. In this modern era as characterized by frequent advancements in digital or smart technologies and the intensifying demand for more robust equipment and machine to accommodate software and application upgrades, placing exclusive reliance on the notion that technology is the sole remedy for organizational challenges appears too certain.[154] It is imperative to generate purposeful, qualified, and competent human resources in the contemporary period characterized by advancements in science and technology. The technology in question has significant potential for both personal and professional advancement of modern leaders and playing a crucial role in the overall progress and maturation of human resources, organizatios, society and nations. Advanced technology, mainly digital and smart technologies, has both pros and cons in the field of development of leaders. However, it is important to acknowledge that these limits are inevitable and should not be overlooked.

Figure 4: In future robot will replace teacher[155]and Modern classroom[156]

In the pursuit of a leadership approach, where technology is utilized as an asset, it is crucial not to overlook personal well-being. Leaders must recognize the importance of the few core assets namely health, family, friends etc. A leader's physical and mental well-being directly impacts their decision-making ability and overall effectiveness. Prioritizing self-care, maintaining a healthy work-life balance, and promoting well-being within the organization are essential. A supportive and nurturing family environment provides leaders with the emotional stability and motivation needed to overcome challenges. Investing time and effort into maintaining strong familial relationships is vital for long-term success. Trusted friendships outside of the professional sphere, offer leaders diverse perspectives, emotional support, and opportunities for personal growth. Cultivating meaningful connections enriches their lives and enhances their leadership capabilities. The world has witnessed remarkable leaders who have harnessed technology to drive innovation and transform industry, organization, education and service sectors. Elon Musk is known for his ventures such as Tesla, SpaceX, and Neuralink. He has demonstrated leadership in sustainable energy, space exploration, and advanced technology. Bill Gates is Co-founder of Microsoft Bill Gates pioneered the personal computer revolution. Through the Bill & Melinda Gates Foundation, he has also focused on global health, education, and poverty eradication. Steve Jobs, as co-founder of Apple, has revolutionized the technology and entertainment industries with iconic products like the iPhone, iPad and many more. His emphasis on user experience and design set new industry standards. Jan Koum and Brian Acton, the developers of WhatsApp an instant messaging app, showcased technological leadership by revolutionizing communication globally through seamless connection of millions of people.

Leadership Styles and Challenges in Twenty-First Century

The twenty-first century has been marked by technological advancement, rapid change, and disruption. During this time, the globe has accomplished unprecedented milestones, which have had a significant impact on how people work and live. The dotcom boom, technological advancements, the birth of the smartphone, the growth of digital as a platform, the introduction of social media, smart technologies such as IoT, 5G/6G, AI, robotics, ML, blockchain, and so on are just a few of the game-changing events that have occurred in a relatively short period of time. They have had a profound impact on how organisations operate and how commerce is conducted globally. The explosion and democratisation of information has been a major result of these developments. Information, when combined with the rapid pace of technology-driven globalisation, has resulted in the emergence of a flatter, more seamless, and fluid global economy. We have also seen the quick rise of emerging economies such as China, India, Brazil, Indonesia, the Middle East, and others, which has resulted in a shift in global economic dominance. All of these changes have had a substantial impact on leadership's position in modern organisations.[157] Modern executives face the difficult burden of navigating their organisations through a complicated and ever-changing global economic context. These strategic forces have an impact not just on countries, but also on industries, marketplaces, segments, and individual products and brands. In today's world, effective leadership necessitates a proactive approach to managing change and its impact on long-term organisational progress.[158]

Kodak is a fantastic example of a corporation that was forced out of the market due to its leadership's failure to successfully manage upheaval and change. Kodak was formerly the largest film company in the world. However, its leadership team failed to fully embrace the revolutionary transition from film to digital because it was fearful that digital would cannibalise its core industry, film.

Due to the substantial reduction in demand for film printing during and after the digital revolution, Kodak was finally forced out of business and had to abandon the market in several of its product lines. Other instances include Blockbuster, Pets.com, and Nokia, whose failure was tied to their inability to comprehend the misalignment of their products with how the markets were growing. Many more examples are on the way in the near future. Leadership is a personality feature that enables an individual to influence the behaviour of others in order to achieve a goal or to persuade others to do things they would not otherwise have the abilities or drive to undertake. Individuals' demands, motivations, and definitions of satisfaction have shifted dramatically in recent years. The ever-changing global business climate has had a tremendous impact on both our personal and professional life. Leadership is even more important in these uncertain times. A few key issues confronting leaders in the twenty-first century are described below.

Geopolitical volatility. Geopolitical issues can cause organisations to suffer quick yet devastating damage. Uncertain geopolitical conditions can drive capital investments away and drain financial assets. High geopolitical volatility may also result in harsher government regulations in local markets, making it more expensive for organisations to do business in specific locations. Geopolitical risks have progressively become a key problem for leadership teams, as most of the components, including as governments, legislation, the environment, trade, labour markets, and so on, are beyond their control.

Technological disruptions. The twenty-first century has been marked by technological disruption, with futurologists and trend analysts claiming that disruption is becoming the norm. Organisations across various industries and sectors, from healthcare to manufacturing to computers, have been influenced by technological disruption. Data mining firms are creating human DNA databases to advance the science of personal identification, 3D printers are being used to print building equipment, everyday products, entire houses, and artificial human organs, and the combination of cloud computing and artificial intelligence has expanded the scope of data-driven decision making. These are just a few examples of how technology has altered the norm in the twenty-first century. The rise of entrepreneurship and startups is linked to these technological upheavals. Startups are quick, agile, and have the potential to significantly disrupt existing models by developing new methods of creating and selling products. All of these changes have a substantial impact on organisations' business and operating structures, as well as how consumers must be treated in today's and tomorrow's marketplaces.

Economic and political uncertainty. When organisationsanalyse geopolitical risks at the country level, they must deal with economic and political uncertainty. Any organisation (whatever of size) wishes to operate in economic and political situations that are stable. Countries with frequent labour strikes, societal upheaval, and turmoil can have a significant negative impact on revenues, profits, and investments. Managing economic and political uncertainty has become a significant leadership problem in the twenty-first century. As organisations strive to expand faster and startups look to scale up faster, economic and political volatility must be factored into every growth strategy.

Shifting demographics. On a worldwide scale, considerable demographic changes have occurred, including shifting family patterns (rise in dual-income and single-parent households), an older population (requiring more health and social services), and an increase in workforce diversity. Because of these changes in demographic makeup, demand for a company's products and services fluctuates on a regular basis. It also implies that a company's product portfolio is under ongoing pressure to remain relevant. This is a problem for leadership teams in terms of developing growth forecasts or developing a sustainable growth plan.

These issues require next-generation leaders to take a different strategy to managing and expanding their organisations in the twenty-first century. Here are some considerations for boardrooms to consider as they develop their leadership strategies for the 21st century.

Having a balanced short and long-term lens. Organisations are constantly under pressure to highlight short-term business wins over long-term plans. Organisations must adopt a short-term perspective in order to report quarterly earnings and profits to satisfy shareholders and financial experts. Long-term initiatives, on the other hand, which necessitate the commitment of organisational resources and deep thought, are crucial for success in today's world. When it comes to capital spending and resource allocation decisions, the ongoing tug-of-war between short-term and long-term objectives causes ambiguity and raises risk. Leadership in the twenty-first century necessitates striking a strategic balance between short-term and long-term company goals.

Achieving this equilibrium is crucial in order to resist forces that have a mid- and long-term influence (e.g., geopolitical variables) as well as those that have a short-term impact, such as a labour strike, civic unrest, competitor copycat behaviour, and so on. Leaders in the twenty-first century must strike a balance between meeting stakeholders' expectations through short-term gains and long-term initiatives that expand and strengthen the company's reputation.

Resilience. In the twenty-first century, resilience will be a critical component of boardroom leadership success. Resilience on all fronts is a requirement in today's world. Rapidly changing consumer demand patterns, the ever-increasing pace of technology-induced disruption, increased market fragmentation, fast shifts in economic development potential, increasingly fluid labour markets, and low entry costs into any market are all elements that require resilience to manage. On top of that, there are constant diversions in the shape of fads, trends, the expansion of digital platforms, and the proliferation of selling channels. Leadership teams must be focused on fundamental components of strategy and relentlessly deliver against them in order to meet both short-term and long-term organisational objectives. This necessitates them being resilient in the face of negative forces, which will almost certainly be present in some way or another.

Horizontal and vertical leadership. Horizontal leadership refers to uniting teams and motivating them to support and achieve a common goal. Vertical leadership, on the other hand, is the antithesis of commanding teams under one's direction in a top-down, military-style approach. Effective leadership is found somewhere in the middle of these two opposing leadership styles. Organisational structures, cultural diversity of work forces, worldwide presence, command-and-control systems, and the role performed by local entities determine leadership styles in today's globe. As the globe flattens and becomes more linked, effective leadership styles increasingly tend to tilt towards giving teams more ownership and responsibility. In a world of collaboration, communities, and networks, leadership teams must listen intently, facilitate the sharing of information and perspectives, and foster a trusting environment. Vertical leadership plays a part as well, but in a different way: being able to make judgements in confusing situations, assisting teams in managing conflicts, acting as a guide in uncertain times, or leading with conviction, courage, and empathy.

Global viewpoints and local insights. We now live in a society that is becoming more globalised while also awakening to a sense of nationalistic pride. A high-level examination of firm operating models will find that local country entities play a larger role in global organisations. Startups with extremely disruptive concepts begin at the national level before expanding globally. This is true not only for the workforce, but also for customers, who are, at the end of the day, two sides of the same coin. As a result, when it comes to leadership, it is critical to strike a balance between global perspectives and local peculiarities. Effective leadership can only have a long-term impact when it has an impact on individuals. Incoming CEOs are now expected to travel throughout the world and meet teams from all local market organisations. This is just one of many aspects of harmonising global and local perspectives. As organisations become flatter and local entities play a larger role, boardrooms must pick executives who can influence and lead across numerous regions and cultures. Having a visible face is insufficient. Connecting with people across the organisation, both internationally and locally, will be a distinguishing aspect of successful leadership in the twenty-first century.

Strong strategic compass. Leaders and executive teams in the twenty-first century must have a strong strategic compass. Great leaders must be self-aware, be passionate visionaries, have a strong sense of purpose, and have a clear sense of direction when leading their people. Last but not least, their personal vision should be completely aligned with the organization's. In today's uncertain circumstances, a leader's operational approach should stay agile. Although progress towards long-term organizational goals is vital, a leader should be open to examining and accepting alternative approaches to these goals. Leaders, like a compass that always points north, must be unwavering even in the face of great disruption and mayhem.

Globalization. Global consciousness is growing in many industries and communities around the world. This transformation in perception and action has had an impact on all aspects of society. Instead of focusing solely on the United States, marketing of American consumer goods, manufacturing, and even entertainment has grown to a global scale. This globalisation of manufacturing, marketing, and competition has resulted in the formation of multinational corporations built to compete on a larger economic playing field. The economy as a whole has gone global. The economic troubles of Mexico, the United Kingdom, or any other country have an impact on the global economy. The stock markets are interconnected.

Increasing Environmental Stress. Environmental issues and the environment's ability to support the world's inhabitants in the future are getting increasingly difficult. While the United States may lead the world in pollution control, environmental issues transcend national borders.

Conflicts between economic and environmental concerns rage on over the world. This is evident in the debates over the use of old growth forests, wetland preservation, fishing rights, and legislation governing chemicals that have an impact on the environment. Concerns regarding our fresh water table are likely to grow as a result of industrial runoff and other infractions. Landfills are still overflowing with rubbish, putting more pressure on recycling. Toxic waste, land development, and complicated environmental phenomena all contribute to health education and human and animal welfare concerns.

Increasing Speed and Dissemination of Information Technology. Mass communication has connected the world in ways that were unheard of fifty years ago. While the Pentium chip is the most recent innovation to computers this year, nanotechnology is just around the bend. Nanotechnology will enable the application of techniques in every subject, from microbiology to political science that will substantially reduce equipment size while increasing processing and disseminating information capacity. Electronic pieces of information are now sent almost instantly. The Internet, CNN, and major news networks rapidly transmit information around the world. As a result, we know what happened halfway around the world very instantly. Keeping information private is nearly impossible. Information technology is made up of "bits," and "bits" do not react in the same way that consumer items do. Consumer items can be halted at borders and their value declared. "Bits" flow across borders electronically, with minimal control. This could explain why our organizations, communities, and individuals now have permeable boundaries. For example, while the Chinese students were protesting in Tienamen Square, they were also communicating with the rest of the world by fax and other media. The Chinese authorities found it difficult, if not impossible, to control the immediate information. There are several examples of this.

Changes in Science and Society. The recent announcement of sheep cloning foreshadows the form of things to come from genetic engineering. One of the scientific advances that will impact our lives is genetic engineering. Bio-medical technology will not only continue to uncover the secrets of the DNA code, but it will also drastically alter how we cure diseases and generate and grow food. New political, social, educational, and organizational frameworks will be required to accommodate social changes. Gender stereotypes will also be modified and publicly disseminated. All of these adjustments will blend together with little delay. These four trends are mutually shaped by and interact with human beings' ethical and spiritual dimensions. "Can humans develop the self-discipline to choose how they currently interact with each other and the environment?" becomes the task and question for leadership. Can we learn to live in harmony with one another? Can humanity learn to coexist with nature? Can we accelerate our understanding of complicated, dynamic difficulties and problems? Will the human race grow and support the necessary diversity to meet and surpass the complexity of the future dynamic system? How far does our current state of consciousness go? What impact does our current human potential have on today's and tomorrow's challenges?"

"Wherever you see a successful business, someone once made a courageous decision," observed the late professor Peter Drucker. Leadership in the twenty-first century will be a series of daring decisions. However, more difficult positive leadership will have a greater influence during these circumstances. Some of the headwinds that global business is currently encountering are the strongest in the world economy's history (followed closely by the two Wars). To effectively traverse such headwinds, an organization need leaders with courage, conviction, strong mental fortitude, unshakable focus, and a strong sense of purpose. But we must also remember that a leader cannot do anything on own. This is more important now than ever before. A leader must have an open mind, be open to cooperation, be able to align opposing ideas, and have the charisma to lead teams with diverse motives and needs in order to achieve crucial organisational objectives. The old perspective of business leaders as figureheads, chiefs, and commanders is fast fading. The characteristics traditionally associated with these roles, charisma and vision, are still crucial in leadership positions, but they are not sufficient in and of themselves. To be successful in today's dynamic corporate market, executives must be able to seamlessly transition between numerous responsibilities. At times, they may need to serve as commanders-in-chief of their organisations, while at others they may need to serve as mentors to a high-performing team or individual. It all comes down to leadership adaptability and the ability to effectively lead across generations, cultures, mindsets, and different sets of incentives. Some important success characteristics for corporate leaders in the twenty-first century include:

Purpose. Having a purpose is crucial, but having an inspirational one is critical. Leaders must have a personal purpose ("what I want this organisation to achieve") that is congruent with the organisational purpose ("what this organization stands for"). Both businesses and their leadership teams should have a defined purpose that extends beyond annual revenue and profit goals. With an unrelenting focus, a clear vision, and a genuine belief in the cause, leaders must walk the walk, not just talk the talk.

Leaders who do not practise what they preach are rapidly abandoned. Leaders who do not lead with clarity and focus suffer the same fate. All of these qualities of leadership are required in the twenty-first century.

Resilience. As previously stated as a crucial implication, resilience will be a highly sought after trait among today's leaders. Failures are viewed as transitory setbacks and opportunities to grow by resilient leaders. During times of upheaval, they also have a strong personality and a positive outlook. A resilient leader finds methods to go forward and stay ahead of the curve in the midst of uncertainty. To demonstrate resilience, leaders must communicate regularly and purposefully, be brave while making long-term strategic bets, and encourage an ever-improving mentality across the organisation.

Networks. Many executives undervalue the significance of networks both within and outside of their organisations. Among the advantages of tapping into and leveraging networks are:

➢ Getting to know the organization's main stakeholders better
➢ Identifying the obstacles that are impeding teamwork and innovation
➢ Effective critical communication cascade to the most influential stakeholders
➢ Identifying and attracting outstanding talent in the marketplace
➢ Identifying possible new suppliers, new technology, consultants, or other industry leaders who can help enhance business performance
➢ Creating, shaping, and implementing successful career paths

Long-term lens. Leaders in the twenty-first century will need to focus on long-term strategy rather than short-term tactics, as well as the ability to think and plan ahead rather than becoming bogged down by specifics. They will need to have a vision for the future in order to lead the road towards strategic execution. Leaders can accomplish this by identifying internal stakeholders, investors, and shareholders that share similar long-term ideals and then working tirelessly in cooperation with them. S&P Dow Jones Indices established its Long-Term Value Creation Global Index in 2016, which assists investors in identifying firms with the potential for long-term value creation. Another strategy to keep the long-term in mind is to properly explain the goals, road map, and implementation plan both internally and outside.

Adaptability and Agility. Great leaders are supposed to be able to think outside the box. Rather than constantly recreating the wheel, they learn to do new and surprising things with the tools they already have, and they encourage others to do the same. Leaders in the twenty-first century must be able to consistently innovate and effectively manage disruptions. To accomplish so, they must remember that everyone has something to offer and create an environment in which every employee feels comfortable suggesting ideas and proposing solutions. This will go a long way towards developing an adaptive and flexible organisation that is ready to meet disruption.

Culture Orientation. Last but not least, leaders must never take their employees for granted. Employees at all levels of the organisation must be continually invested in through skill development, coaching, and welfare. According to studies, millennials are making up an increasingly larger portion of the workforce today (about one-third of the worldwide workforce), and they desire more freedom and control over their lives and professions while still being on track for career advancement. Leaders must comprehend these broad transformations in attitudes towards work and the workplace while remaining guided by a set of consistent values in order to strengthen brand equity and organisational culture. If CEOs do not prioritise people, their organisations will suffer from frequent churn, stalled progress, and diluted vision.[159]

Every day, we see changes in how people live and work, as well as how they lead, manage, and communicate. Nonetheless, a leader in the twenty-first century must be able to ensure that the subordinate is considered as a member of the organisation, not just a worker who is ordered and instructed around.[160] In this sense, a leader must be able to foster a culture of trust and community within the organisation. Parallel to this viewpoint, leaders fail to recognise the importance of strategic communication in ensuring that their people do the right thing rather than just doing the right thing by carefully managing the internal and external relationships in supporting organisational growth Zerfass and Huck, in their study, discussed leadership as a medium for communicating the vision of the organisation, in both transactional and transformational leadership.[161] Members of the organisation desire a leader who can motivate them and teach them how to accomplish something they can't do. A leader is defined as someone who not only exemplifies but also has the capacity to express the activity clearly and loudly. A leader must, in this sense, walk the walk. A superior-subordinate connection is critical in ensuring that decisions are accepted by everyone in the organisation.

According to Rost, in the twenty-first century, leadership has taken on a new dimension that incorporates collaborative efforts among group members.[162] As a result, the essence of leadership is not just the leader's responsibility, but the interaction between the leader and the subordinates.

Communication among colleagues and fellow employees is carried out in the organisation to communicate and retrieve information in a timely and effective manner, coordinate and complete job responsibilities, make decisions, and lastly to minimise or resolve conflicts in the organisation. Communication in organisational life provides a foundation for understanding virtually every human process that occurs in an organisation, such as conflict, cooperation, decision making, the use of power and authority, compliance gaining, resistance, morale and cohesion, and relationship creation and maintenance. According to Littlejohn and Foss, an organisation consists of at least two or more persons who are interdependent in terms of input, throughput, and output.[163] They collaborate to produce, sell, or serve another party, often known as a client, customer, or the general public.[164] According to Beebe and Masterson, communication is the process of acting on information.[165] It is also a process in which messages are delivered and received at the same time, allowing us to make sense of the world and share that understanding with others. In most circumstances, face-to-face communication provides the best chance to explain meaning and address doubt and misunderstanding.[166] Several academics have discovered that how members of a group interact with one another is critical in determining what happens when people collaborate.

Communication's duties in the workplace include controlling what goes between the employer and the employee, motivating employees, balancing the demands and goals of the organisation, and facilitating decision making. There are also traditional communication positions such as gatekeeper, liaison, bridge, isolate, cosmopolite, and opinion leader. Today, mastering communication skills is a prerequisite for any leader. It is no longer an option, but rather a prerequisite for achieving greatness. Leaders must communicate effectively. The performance of the organization's members is determined by the leader's decisions. Making a decision is important, but putting it into action is another matter. As a result, harnessing communication abilities is empirical for leaders. After all, relationship building is at the heart of effective leadership communication. Kouzes and Posner identified six greatest characteristics: honesty, foresight, inspiration, competence, fairness, and support for an appreciated leader.[167] These characteristics are especially significant in the superior-subordinate relationship because they enable people to close ranks regardless of the status quo. In order to solve the issue of relationships between a leader and his or her followers, the leader must grasp what communication is and how it contributes to ensuring that the action is communicated. Eisenberg claimed that the most significant communication mechanisms in organisations are those that govern interactions between superiors and subordinates.[168]

The practise of leadership in this sense is linked to the supremacy of the authority, which resulted in the responsibility not only to plan, but also to lead and ensure that the subordinates follow it. This will later transfer into good rapport between the leader and the members. According to Gibb, a supportive climate leads to subordinate satisfaction and communication accuracy, whereas a defensive climate leads to discontent and communication distortion.[169] As a result, the leader must understand the organization's communication structure in order for information to be transmitted successfully. According to Daniel et al., formal communication refers to message flow between organisational positions via officially defined channels.[170] Knowing where the communication will flow and terminate is critical since it impacts the outcome of the message being delivered. It is a waste of time and effort if the members do not get the message; even more so if it costs the organisation money. When considering formal communication flow, the organization's hierarchy structure is critical. According to Daniel et al., the concept of hierarchy is so deeply embedded in organisational life that formal communication is typically characterised in terms of the three directions of message flow inside a hierarchical system: downward, upward, and horizontal.[171] To ensure that commercial transactions are completed, the leader must communicate. These practises span from settling basic difficulties among stakeholders to making critical decisions that could cost millions of dollars at the corporate level. Again, communication remains a critical indication for good service, delivery, and development at all levels of organisation that cross roles and actions. To that degree, the manner the leader communicates with the members includes a variety of delivery mechanisms along the information flow. Work relationships will grow stronger, more informed, and meaningful when a leader is able to handle communication successfully. The following are the purpose of leadership in thetwentieth century.

➢ To foster an atmosphere in which people can thrive, grow, and live in harmony with one another;
➢ To promote peace with environment and so ensure future generations' sustainability,

➢ To build communities of mutual care and shared responsibility, where everyone counts and everyone's welfare and dignity is valued and supported.

Communication is a critical element in providing good leadership in the twenty-first century organisation. As a result, modern leaders must understand and apply innovative technologies. Setting the proper course and aligning people with the desired course. Significantly, future leaders must be able to ensure that subordinates are treated as members of the organisation, hence determining employee motivation and performance through consistency in offering excellent leadership. In this regard, Mai and Akerson offer important techniques for providing unambiguous direction to subordinates.[172]

➢ Focus on a single goal whenever possible, but make sure it is clearly stated how it fits in with everything else.
➢ Keep the conversation to two or three main ideas.
➢ Prioritise the main points.
➢ Translate strategy into operational jargon.
➢ Rephrase yourself.
➢ Explain the thinking behind any actions or decisions.
➢ Invite questions and then wait for them.
➢ Compile a summary

20th Century Leadership Practice and Pattern	21th Century Leadership Practice and Pattern
Leadership	Service
Transactions	relationships
Inside Out	Outside in
Top- Down	Bottom Up
Boss to Employee	Leader to Leader
Administer	Empower
Efficient	Effective
Centralized	De Centralized
Information	Judgment
Value in Natural Resources, Products	Value in People
Individual Accomplishment	Collaboration
Tangible Value	Intangible Value
Credentials	Lifetime Learning
Quantitative	Soft Skills
Linear	Intuitive
Inputs	Output
Time Management	Value Management
Security	Adaptability
Specialist	Adaptable Generalist
Hidden Liabilities	Undiscovered Value
Autocrat/ Micro Manager	Coach, Conductor
Workaholic	Integrated Life
Male/ Patriarchal Model	Female/ Inclusive Model
Brick and Mortar	Virtual
Organization Chart	Digitized Information String
Speak	Listen
Institution	Network
National	Global/ Local
Authority Conferred	Consent Earned
Small Array of Leadership Styles	Infinite Leadership Styles
Retirement	Redeployment
Failure	Stepping Stone
Authoritarian	Renegade
Answers and Assertions	Questions
Broadest and inform	Narrowcast and Engage
Employees	Team Members

Work Life Separation	Work Life Integration
Career Path	Life Path
Servant/Ethical leadership	Leadership

Figure 1: Leadership differences between twentieth and twenty-first centuries.[173]

Collaborative is the new leadership paradigm has been called by a number of different names like, shared, participatory, collective, collaborative, cooperative, democratic, flexible, inclusive, roaming, distributed, relational, and post heroic are some of the names given to the new leadership paradigm. While agreement on the name of this "new leadership" has yet to be reached, there is a growing recognition that the hierarchical leadership patterns that served us in the past are not well suited to the global complexity, rapid change, interdependence, and multifaceted challenges described above.[174] The fundamental issue in the information era will be to inspire the new, better-educated workforce to be committed, self-managing, and life-long learners. The roots of this "people-focused" leadership can be found in democratic traditions. It is based on the concept that in the complex future, "answers are to be found in community" (Wheatley) in group-centered organisations where "everyone can learn continually" (Senge). Followers are being changed into collaborators, partners, co-leaders, life-long learners, and leaders. The command and control leaders at the top of the pyramid are being challenged to change as the demand for this new leadership develops. They will be expected to become facilitators, stewards, coaches, designers, and teachers (Senge). They are being challenged to become leaders who "walk their talk" and serve as role models by encouraging others, delegating, and serving. Effective leaders recognise that everyone have leadership qualities that can and should be recognised and utilised. As a result of the new leadership paradigm, our conceptual framework of what leadership is and what effective leaders accomplish is being restructured. It is redefining the role of "followers" and reshaping the design of organisations for the twenty-first century. This spirit is captured in a recent brochure from the Robert Greenleaf Centre on Servant-Leadership, which states, "The old organisational pyramids of the nineteenth century are crumbling, being replaced by upside-down pyramids and circles and connections." The term collaborative and reciprocal leadership is used here to describe the process at the heart of this change.[175] Because collaborative leadership is more adaptable and fluid, focused on relationships and people's needs, we do not intend to obsess on a definition or a single notion that represents "new leadership." What is more crucial is to help individuals understand and practise the objective of the new leadership, as well as to explain how collaborative leadership concepts can work for them in the setting in which they choose to lead. The integration of the past, present, and future is required for evolution or advancement. In the midst of constant change in an interdependent society, this awareness provides a stable foundation from which to move forward into the uncertainty of tomorrow, knowing that collaborative structures have served people well in the past and can lead the way to cooperatively shape the future.[176]

The awareness that no single person has the solutions to the multifaceted difficulties that a group or organisation must handle is a fundamental tenet of collaborative leadership. In this setting, leadership necessitates a set of values that enable all members to act, as well as a method that permits the collective wisdom to emerge. These ideas must be founded on the belief that people have the knowledge and creativity to solve the difficulties they encounter.[177] They promote the formation of organisations that promote collective action through a common vision, ownership, and mutual values.[178] The natural sciences, as well as history, have had a significant impact on the emergence of collaborative leadership. The Newtonian view of a mechanistic world in which people obeyed instructions and repeated, taught answers sufficed has given way to an organic, systems-oriented, and dynamic understanding of how people, groups, and organisations function. This systems perspective necessitates nonlinear, comprehensive, and diverse leadership techniques that emphasise interactive engagement, open communication, continual learning, and relationship focus. Leadership then becomes the design of systems, institutions, and environments in which this interaction and learning can take place. While change and adaptability are important aspects of a systems approach, there are core principles that nurture the interaction and learning that are essential to collaborative leadership. As Wheatley has stated, "Leadership is making sure you have the right patterns in place." Senge refers to this as fashioning an environment "where everyone takes on the responsibility for learning." Seven of these principles are as follows:

1. Promoting a Collective Leadership Process "Post heroic" leadership shifts away from the idea that the "great man" has all the answers and towards a shared, distributed, and fluid understanding of leadership. This is founded on the notion that different people assume leadership roles depending on the need, context, and requirements, and that everyone has leadership potential.

Collaborative leaders foster friendly and open workplaces that stimulate initiative, facilitate information exchange, and recognise each individual's contribution. Individuals are also encouraged to study and develop their leadership skills. As a result, leadership is supporting others to grow and learn. For example, in Scott Peck's work on community building, the "leader" is a facilitator whose purpose it is to develop and maintain a "safe space" in which individuals can discover themselves and learn to interact to one another honestly.[179] The emphasis shifts away from the individual leader and onto the group, community or organisation. In truth, the nominal leader may not always be obvious.

2. Creating a Learning Environment a learner-centered organisation or group encourages continual self-development and reflection. Listening, encouraging open-mindedness, seeking constructive input, sharing ideas, and considering conflict as a chance for progress are all cultural norms. People who are closest to the problem or opportunity are encouraged to interact and come up with ideas or novel methods. Senge believes that in order to accomplish this, the group must operate "in a mode of inquiry, knowing that nobody knows and everybody can learn continuously." As the group or organisationpractises learning together, open communication, mutual trust, shared purpose, and a sense of communal ownership arise. Senge describes this as "communities of commitment where people are continually learning how to learn together."[180] As a result, people can step outside of their comfort zones and face the risks that come with managing change.

3. Supporting Relationships and interconnectivity People's relationships and interconnectivity become a major dynamic in collaborative leadership. Respect, honesty, expecting the best from others, and the opportunity to exercise personal choice are values that provide the groundwork for covenant partnerships to flourish.[181] These bonds are built on mutual trust and accountability. Collaborative leadership focuses on increasing the capacity of individuals and groups to live these principles, to profit from their interdependence, and to recognise that disagreement and diversity may stimulate growth and creativity. Relationships are also reinforced by the formation of a shared vision, which helps people to create common goals, set common directions, and rise above self-interest. Shared vision and values serve as a governing force that allows people to organise and manage themselves, allowing them to complete tasks without the need for control or rigid policies and procedures.

4. Power and ownership must be disseminated throughout the organisation for leadership to be collaborative or shared. Shared power indicates that everyone is responsible for leading, making decisions, and learning. Groups and teams are frequently utilised to make decisions, sometimes by consensus. Individual integrity and peer agreements underpin accountability and responsibility. Partnerships and coalitions form as people work together to achieve common goals, resulting in lateral networks of mutual influence (Rost and Nirenberg). This approach is described by KilJanow in The Inventive Organisation as many relationships functioning in a flexible, flattened structure based on partnerships, selfregulation, and interdependence. Naisbitt and Aburdene refer to this as a lattice or grid in Re-Inventing the Corporation, where power is found in the centre rather than at the top.[182] As a result, hierarchical structures are being replaced by crisscrossing networks with overlapping, shifting, and flexible boundaries. This web-like structure encourages active engagement, interaction, and empowerment.

5. Because it flips hierarchical leadership upside down, practising Stewardship and Service Stewardship is the cornerstone of reciprocal or shared leadership. Stewardship is concerned with meeting the needs of others rather than with exercising privilege, power, and control. Stewardship, according to Block, prefers collaboration over patriarchy or hierarchy; empowerment over dependency; and service before self-interest. As a result, the leader is "in service, rather than in control." In his seminal work The Servant as Leader, Robert Greenleaf explains this dedication as "wanting to serve first." Then, by conscious choice, one aspires to lead." The litmus test of collaborative leadership is whether people's needs are met. People can form a community of shared responsibility when they feel respected and valued as partners.

6. Respecting Diversity and Inclusiveness In order for people to respect one another, create trust, and speak honestly, they must first learn to embrace and value individual differences. The rich soil that promotes relationships, collaborations, and collaborative networks is diversity. This is represented in Scott Peck's statement, "Perhaps the most necessary key to community achievement is the appreciation of differences." Respecting each person's perspective and personal style allows them to offer their ideas and talents so that people can learn together.[183] Furthermore, inclusivity is an important part in transforming followers into stakeholders and cultivating community ownership. It is an idea that diversity fosters creativity and greatness. Respecting other points of view, encouraging open-mindedness, engaging in discourse, and listening with attention and empathy can all help to develop real diversity.

7. Committing to Self-Development The collaborative or shared leadership movement is, at its core, a personal transformation fueled by "A commitment to work on yourself first." (Block) Greenleaf believed that the motivation to serve was based on the desire for one's "own healing."[184] Leaders model how to focus on personal mastery and competence by working on personal learning and progress.

This authenticity and ability to actually "live" the principles of collaborative leadership is reflected in Wheatley's statement, "We must be what we want to become, we must, in every step of the way embody the future towards which we are aiming." This resonates with Mahatma Ghandi's wordswhorecognised that personal transformation was the heartbeat of leadership: "We must be the change we wish to see in the world." So, if these are the collaborative leadership principles, what are the practises or functions that collaborative leaders must perform? The following are the functions of collaborative leaderships: we must focus on the purpose of leadership rather than the definition of leadership; the new leadership paradigm is collective and reciprocal; and there are tremendous trends propelling us in this direction.

Creating a culture of collaborative leadership begins with a shared vision that is supported by a set of specific values or beliefs that are interwoven into the person's behaviour.[185] For a person to practise this type of leadership, some "inner work" is required. The practise of real collective or shared leadership does not occur without this inner work.[186] Values and beliefs are the starting point for this inner effort. People who practise shared leadership think that everyone is capable of leading themselves. Furthermore, they believe that the talents and resources required to complete a task can be found among the members of the group rather than in a single leader. As a result, the purpose of positional leaders is to offer a structure that allows individuals to lead themselves rather than to direct or tell them. This implies that positional leaders share or spread the "power" of their position. As a result, they enable the group to take on responsibility and discover their own ability to collaborate, decide, plan, and act. They are willing and able to share their position's authority to the greatest extent possible under the circumstances. Their personal authority is still obvious, but they share their positional power.[187] They may substitute or transform the desire for positional dominance for the pleasure of witnessing the group's evolution as a learning organisation or community. After weaving the agreed vision, modelling is an important component. There is honesty in their concept of shared leadership, which is mirrored in how they structure and respond to the group's progress. This confluence of practise, vision, and modeling offers group members confidence that leaders "walk their talk" by believing in each individual and their collective action. Collective/Reciprocal leaders devote time to establishing the environment as a learning environment. This could include the following: First, they establish the bar for success. Second, the group is encouraged to take risks and question conventional wisdom.

They are even encouraged to question their own ideas about what they can and cannot do in the absence of precise direction from a positional authority. The establishment of a safety net encourages risk-taking. The safety net fosters an environment in which group members believe it is safe to confront and exercise personal choice in the pursuit of mutually declared goals. People, according to Peter Block, trade sovereignty or freedom of choice for safety. A vital stage in the transition to the new paradigm of shared leadership is for group members to use the freedom of choice that comes with being responsible and accountable to themselves and each other (Kelley, 1992; Chaleff, 1995). All group members are given information so that they have enough knowledge and understanding of the work to make an informed decision (Wheatley, 1996). Positional leaders do not have to be the major source of knowledge. Most of the time, members must rely on one another and their abilities to obtain reliable information rather than a positional authority. This shift in information source leads to increased self-sufficiency and interdependence. Members begin to believe they can influence the situation and the outcome after having power, choice, and information. The ensuing accumulation of actual triumphs reinforces this idea. The interdependent structures and linkages aid in the understanding of how diverse skills are distributed among group members. This promotes the group's acceptance of varying levels of readiness to put this mix of individual responsibility and shared leadership and accountability into practise.[188] It also teaches members that they can both learn from and rely on one another. These interconnected structures provide assistance to group members as they collaborate to complete the assigned task. As groups learn this new behaviour, they require confirmation that the ambiguity or anxiety they may be feeling as a result of this new way of operating is normal and that their sentiments are part of group transformation. A group frequently experiences ambiguity, irritation, disorientation, dread, insecurity, and a desperate yearning for positional leaders to come to their aid. All of this moves leaders' roles to that of facilitators, supporters, advisors, and, on occasion, teachers. This experience has resulted in excitement, ownership of the process and product, confidence and competency, and better ideas and learning for group members.

To deal with these particular problems, leaders in the twenty-first century must acquire a modern attitude. Agility is the key. It is critical to be adaptable, open to change, and proactive. As a leader, you must engage on a deeper level with your team members, creating an environment where innovation thrives and change is not feared but welcomed. As a result, effective leadership in the twenty-first century can be reduced to a few key activities. For example, instead of focusing exclusively on output, adopt a more people-centric management style; design innovative ways of working and strategies that are appropriate for the current situation; and aggressively implement new procedures and inspire teams to embrace change. This modern leadership approach draws on a wide range of skills and attributes, including: fostering innovation, collaboration, and a sense of purpose while building resilient teams; tapping into the potential of each team member; leveraging the power of data to boost team performance and drive business growth; ensuring consistent productivity while managing remote teams; and focusing on self-development to adapt and grow in an ever-changing world. In this new era of leadership, the importance of effective communication and, more crucially, active listening cannot be stressed. Employee listening technologies have become a vital asset for modern leaders who want to be in tune with their teams' thoughts, issues, and suggestions.[189] When it comes to making strategic, business-oriented decisions, leaders in government, non-profit, and education organisations have distinct hurdles. These decisions have significant implications with high stakes if they are not well planned and performed.[190]

Figure 5: Leadership challenges around the world[191]and respond to those challenges[192]

Conflicts and bloodshed, repression and oppression have always existed in the globe, resulting in situations where no one truly wins and culminating in stalemates that degrade economic order - and the human condition. Whether or whether conflicts can be won, the human cost of constructing a durable peace must be considered, and this task now falls to our future leaders and followers. Expert contributors to Peace, Reconciliation, and Social Justice Leadership in the Twenty-First Century look at how leaders and followers might promote pacifism, peace building, nonviolence, forgiveness, and social collaboration. The chapters concentrate on the impact of constructive public policies on national and international order, as well as the function of leadership and followership in reconciling differences and personifying space. They incorporate lessons learnt from post-conflict societies in Rwanda, Sri Lanka, Bosnia and Herzegovina, Chile, and other places to remind us all that peace is a community effort in which no one can be left out. This research, which brings together top scholars and practitioners from the fields of leadership, followership, transitional justice, and international law, provides a model for how people-led, grassroots activities might build reconciliation and a more peaceful world.[193] The complexity that leaders face in the twenty-first century necessitates the establishment of three key pillars: value-based leadership, network leadership, and systemic resilience.[194]

Personal Leadership Development and Practicein Twenty-First Century

Personal leadership entails taking control of one's own life and obligations. Being willing to enhance your capacities and strengths is an important part of evolving as a leader.[195] It's also about having the confidence to speak up even when you don't believe in yourself. Leaders must muster the fortitude to drive them forward and explain their case.[196] Effective leaders also have the confidence to seek for help and make an effort to be well-prepared when confronted with major issues. Seeking assistance is a brave gesture that gives people the satisfaction of knowing they have helped. Leadership entails responsibility, drive, tenacity, and strategy. Setting objectives for yourself is an easy approach to take responsibility for your own life. Goals are things you desire to do, whether they are huge, long-term goals like graduating from university/starting a family/becoming a carpenter/being an artist, etc., or short-term goals like learning to draw. Setting goals and working towards them might make leaders to feel better about them by providing a sense of pride and success. Working towards their personal leadership objectives may summarize below.

- Take some time to properly identify what you want and whether you can practically achieve it.
- Considers both long-term and short-term objectives. Many people spend their lives bouncing from one job to the next or racing around attempting to accomplish more while actually accomplishing very little.
- We must establish SMART goals, which are Specific, Measurable, Achievable, Relevant, and Time-bound. These objectives are specific, attainable, and significant.[197] Setting SMART objectives allows you to clarify your thoughts, focus your efforts, make better use of your time and resources, and boost your chances of accomplishing your life goals.
- Have milestones along the road to prove that we are on the right track. For example, if we want to be an artist in the long run, some short-term milestones may include: learning to draw; enrolling in art school; holding an exhibition of our work for friends and family, and so on.

On the other hand, as previously discussed, contemporary leadership theories provide useful insights into how leaders can inspire, motivate, and assist their staff to achieve organisational success. Leaders can adapt their leadership style to the situation at hand, build positive relationships based on trust and respect, and prioritise the needs of their followers by understanding the principles and components of popular contemporary leadership theories such as transformational, situational, servant, authentic, and leader-member exchange theory. Real-world examples of these theories in action demonstrate the benefits of implementing current leadership ideas, such as higher employee engagement and satisfaction, improved organisational performance, and overall organisational success. To remain competitive and achieve long-term success in today's fast-paced and continuously changing corporate world, leaders must comprehend and use contemporary leadership theories. Leaders may inspire and motivate their workers to reach their full potential, create a happy and productive work environment, and ultimately drive organisational success by adopting a modern leadership strategy.

Leaders of the twenty-first century motivate others to change their attitudes and actions in accordance with an empowering vision.[198] Leadership effectiveness is influenced by factors such as vision, articulation, rational intelligence, emotional intelligence, and spiritual intelligence.[199] As a result, the following principles of 21st century leadership might be summarised.

- Today, everyone can lead because everyone serves. According to James M Strock, if leadership is basically about helping others, then any individual should be able to switch between being a leader and a follower.[200]
- People are an enterprise's most precious resource. According to Mark Zuckerberg, "one of the most profound changes that more openness and transparency brings is that it places more weight and importance on building better social relationships and being more trustworthy."
- We are transitioning from a transactional to a relationship-based world.[201]
- Leadership is a partnership of empowered, consenting adults.
- Leadership is a fluid relationship.[202] We now live in a time when leadership is seen as the solution to any problem. Managers are now expected to give 'visionary,' 'charismatic,' 'transformational,' and 'genuine' leadership. This is what 'followers' are believed to require in order functioning to their full potential.
- Communication is essential in 21st-century leadership.[203] Dwight Eisenhower has been underappreciated, which could be attributed to his senior age in office, his erratic communication abilities, and his failure to give a forward-thinking vision on the looming subject of civil rights.
- There is no such thing as a universal leadership style. According to Mahatma Gandhi, action reveals priorities. The brain is a remarkable organ; it begins working the moment you wake up and does not stop until you arrive at work.[204]
- Leadership positions are overlapping. Words with me are instruments, declared Theodore Roosevelt. I want people to know that I am serious, that I mean exactly what I say, and that I stand for the things that are fundamental to civilization.
- The distinctive responsibility of a leader is to imagine and advance a vision.[205] Some detractors have suggested that Ronald Reagan's success in a variety of jobs, culminating in his election as a two-term President of the United States, was due to a sequence of fortunate accidents. Such a criticism is not supported by evidence. But it is true that Reagan's approach to work and life was unconventional.[206]
- The ultimate level of leadership connection is love. According to Martin Luther King, Jr., "everyone can be great because everyone can serve." You do not need a college degree to serve. You don't have to convince your subject and verb to serve....All you need is a heart filled of grace and a spirit fueled by love.[207]
- Character is a source of competitive advantage.[208] Shakespeare once remarked, "Love all, trust few, do wrong to none." Winston Churchill once quipped, "It costs nothing to be polite when you have to kill a man."

Today's leadership aimed is improvement and at the self-management of the people entrusted to it. It has provided a definition of meaning. Leadership creates, develops and completes. Usually a status quo can be transferred into a better future, sometimes maintaining a good status quo is a leadership task. In fact, today Leadership deals responsibly with resources. The goal is a circular economy and no longer unlimited growth. Leadership always considers the consequences of its actions for people and ecosystems. Again, modern Leadership restrains itself only as much leadership as necessary. In all leadership practice hierarchy is still needed, like, if the employee has little experience, if there is manager liability, if personal and organizational goals are contradictory. Now, leadership goes in both directions, employees also lead their managers.[209]Now leadership is always as cooperative as possible. It does not see employees as subordinates, but as partners at eye level. It is based on agreements and tries to win over the commitment of employees for concerns and thus builds more on intrinsic than extrinsic motivation. Just as companies are paid for services by their customers, employees are paid more and more for agreed and achieved results and less on the basis of working hours. Today's leaders develop the potential of employees. They continue to learn on their own. The Leaders are more concerned with the collective good than with the individual good. They support learning. Today's leaders are disruption surfers and they are aware of the changes in their environment and choose the right disruption waves to ride. A responsible manager or leader strives to leave the world better than he found it. However, by exercising restraint, leadership creates an environment in which everyone is happy to contribute their own strengths and concerns. Today's leaders serve the system. They make themselves aware of the effects of their own actions and interactions in the system.[210] They ensure that decisions are made on the basis of short and long term considerations.

Today honesty, adaptability and balanced are three serious leadership trait. Mentoring and coaching are two powerful tools serve as a guiding light for aspiring modern leaders and helping them to navigate the complexities of the modern world. Coaches help future leaders to become more agile, flexible, acceptable and equipping them with the tools to navigate change, complex and uncertainty. In coaching, coaches identify critical areas where the coachee needs improvement and provide custom-made guidance to enhance those skills and know-how. Whether it's communication, analytic, decision-making, or conflict resolution, coaching helps future leaders become more effective and efficient in their roles. Coaches provide honest feedback and hold the coachee accountable for their actions and past decisions. This accountability fosters a culture of continuous improvement, self-development and personal responsibility. Leaders are often faced with complex challenges and critical situations. Coaching equips and prepares future leaders with problem-solving techniques, decision-making ways and strategies to address these issues effectively and purposefully. Coaching is a more structured and goal-oriented process to develop a leader. Coaching is usually hones specific skills and drives goal achievement a coach, naturally a professional with expertise in a specific area, helps the coachee set and achieve specific objectives. Coaching can be short-term or project-based, focusing on skill development, problem-solving, decision-making, performance enhancement, etc.

Figure 6: Proper guidance[211]and develop relation is prime task of future leaders[212]

On the other hand, mentoring is a dynamic relationship between a seasoned, experienced individual (as the mentor) and a less experienced and new comer individual (the as mentee). The mentor offers guidance, and support, as well as intelligence and wisdom gained from their own journey, helping the mentee grow both personally and professionally. Mentoring often involves a long-term commitment, fostering a deep sense of trust, close-relationship and connection. Experienced mentors possess a wealth of knowledge, wisdom and skill and they can share these pearls of wisdom with their mentees helping them to avoid common pitfalls and navigate challenges more efficiently and successfully. As leadership is usually lonely and challenging, so mentors provide mentees required emotional support and they acting as a trusted confidant by listening, empathizing, and offering guidance during difficult times. Beyond professional development, mentoring can contribute to personal growth. Mentoring is a vital tool for succession planning for any organization.

It ensures a pipeline of well-prepared leaders ready to step into key roles when needed. Finally, in the journey to nurturing and preparing future leaders, mentoring and coaching are indispensable tools. Both are offer guidance, wisdom, and emotional support. In summaries, they create a powerful collaboration that helps aspiring and empower leaders to develop into confident, capable individuals ready to tackle the future challenges of leadership. However, it can be difficult to find the right mentor or coach in perfect time, and the relationships require commitment and effort from both parties. Today's leaders who sometimes feel overcome by their work can take heart in the fact that they're not alone. By focusing and adjusting few positive behavioral approaches leaders can beat back those feelings and challenges to provide more value of their organization as they take on the most pressing leadership challenges. There will always be more things competing for their attention than leaders have time and energy to do.[213] By understanding and following above discussed framework, leaders in any organization will gain better role clarity and strengthen their team's alignment both of which are necessary when responding to top leadership challenges.

Effective leadership is the backbone of all organizations. Leaders must able to inspire the member to act in a manner of which will embody the work culture in them. When acting as a facilitator, leadership will require the selfless act of motivating and inspiring which in return shall satisfy the needs of the member and drive them to perform even better.[214] Equipped with the effective modern leadership model, a leader will be able to communicate and lead effectively while provide direction across the organization, notwithstanding subordinate alone in coping with stakeholder's expectations and perceptions for the betterment of the organization. Technology has truly become an indispensable tool for leaders in today's fast-paced and interconnected world. Modern leaders must carefully evaluate the feasibility, viability, and legality of technological initiatives. By embodying core values, nurturing personal assets, and drawing inspiration from advanced technologies, leaders can effectively leverage technologies to drive innovation, navigate change, and achieve sustainable success in their respective organizations. Although it seems that modern leadership in the 21st century is highly challenging, it can be highly rewarding when done right. Whether it is an individual or a leadership team, the characteristics of effective modern leadership are applicable to both.[215] The individual human traits, knowledge, wisdom, skill of modern leadership are the pillars of effective leadership model. Organizations need to constantly identify leaders with traits, knowledge, wisdom, skill and need to train their existing leadership teams to acquire these requirements.

There is very little evidence that the so-called naturally born leader really exists. Continuing and ongoing studies are showing that the concept of a natural born leader has little merit. One reason for this error may be that people often mistake charisma for leadership. It is true that some leaders possess a great amount of charisma. However, many leaders do not. In reality leaders are not born, they are forged by many factors. Some factors that often forge effective leadership traits are honesty, education, preparation, experience, opportunity, balanced, etc. Wise leaders are beginning to understand that it is their responsibility to develop followership by encouraging the followers' participation in goal setting and objectives. Future leaders will be viewing followers as partners in the enterprise who should be encouraged to pursue innovation and given the ability to do their job. Leadership is important because the development of positive leadership skills can have a beneficial and powerful impact in virtually every area of our life. Acquiring, understanding and exhibiting leadership skills will have a constructive influence within future workplace environment, within community and to develop personal relationships with others. Effective leadership is a skill comprised of many different traits or qualities. Some of these qualities include vision, mission, values, commitment, motivation, and consensus building. The lack of any of these important traits or qualities may greatly reduce the effectiveness of a leader. The key qualities of future leaders are as follows.

Humility. Displaying humility makes a leader 'more human' and is about sharing authority and inviting feedback rather than imposing change and leading by decree.

Trust.Leaders must earn the trust of their teams through their actions and they must trust employees to make decisions and work autonomously.[216]

Transparency.Transparency must work hand-in-hand with trust. Without honesty and openness, trust can never be achieved. When leaders are transparent with their team about how they can collectively work together to achieve the company's purpose, there's a 103% increase in the perception of employee experience and an 87% increase in the amount of great work happening.

Empowerment.When leaders empower their people to take ownership, make decisions, lead and innovate, there's a 78% increase in engagement, a 255% increase in the incidence of great work and how leaders are perceived by their employees is improved by 184%.

Enablement. Employees need to be enabled to make a difference. It's the responsibility of leaders to develop and grow their employees, giving them the necessary skills and experiences for performing great work.[217]

Prioritizing wellbeing. Nowadays about 50% of employees are experiencing moderate-to-severe burnout and so the wellbeing of staff must be a priority for leaders. This means getting to know employees on a personal level to understanding what makes them 'tick', how they like to work and what support they may appreciate. By having a 'people first' culture in which leaders focus on people as individuals, the likelihood of burnout is significantly reduced.

Mentorship. When a leader is an active mentor, employees feel a 102% increase in motivation levels and perceive their leader 320% more favourably.

Empathy. It's important to understand and recognize other peoples' feelings, needs and challenges. By displaying empathy, leaders become far more relatable and develop stronger connections with their teams. An unprecedented situation is going on at present where every single person on earth is dealing with the same thing, differently. While the impact of Covid-19 was global, its impact on a personal level is different for every one of us. There is a well said that all of us are carrying rocks in our backpacks, and some days those rocks are heavier than others. Just acknowledging this is a great start.[218]

Recognition. Appreciating others and giving regular praise is key to nurturing a happy and healthy team who are more willing to go 'the extra mile'. Recognizing people regularly, and not just when an accomplishment has been made, leads to an 83% increase in employee engagement.

Honesty. Infact, honesty fosters accountability. When leaders are honest, their team becomes accountable for their actions. This can help create a culture of responsibility, confident and believe; where everyone takes ownership of their work and strives to achieve their goals. Actually, honesty is crucial for effective leadership and it continues in future. It builds faith, sets example, encourages feedback, fosters accountability and develop favourable culture.

Conclusion

A leader who is equipped with the effective leadership communication system and tools will be able to communicate effectively while providing direction across the organisation, regardless of subordinate alone, in dealing with stakeholder expectations and perceptions for the betterment of the organisation. Technology has truly become an indispensable tool for leaders in today's fast-paced and interconnected world. Leaders do not always have complete control over what occurs to them. To reply, leaders must be able to think on their feet. They must be able to respond to fast changing events by remaining awake to what is going on around them so that they can respond appropriately. They may create an action plan to help them to reach their objectives. Creating an action plan requires few important steps. Leaders must create a life goal for them. They need to prepare some activities that will help them to achieve their goal and commitment to overcoming barriers in order to achieve it. They need to implement the action plan, but keep in mind that even the best-laid plans can go wrong, so be adaptable and innovative. They should monitor their milestones to measure their progress, and make modifications as they go; they may need to change their goals at times along with vision. Future leaders must carefully evaluate the feasibility, viability, and legality of technological initiatives. By embodying fundamental values, cultivating personal strengths, and drawing inspiration from technological and global perspective leaders, they may effectively harness technology to generate innovation, navigate change, and achieve sustained success in their particular enterprises. Although it seems that leading in the twenty-first century is exceedingly tough, it can be highly rewarding when done well. Whether it is a person or a leadership team, the traits of effective leadership are applicable to both. The individual human traits of leadership are the pillars of this effective leadership practice. Organizations need to constantly identify leaders with such traits or they need to train their existing leadership teams to acquire these traits along with technological advancement.

It is critical not to disregard personal well-being when pursuing a leadership approach in which technology is used as an asset. Leaders must recognize and take-care the value of a few key personal assets, such as health, family, team-mates or friends. The physical and mental well-being of a leader has a direct impact on their decision-making abilities and overall effectiveness. Prioritising self-care, keeping a healthy work-life balance, maintaining relationship, think globally and encouraging organisational well-being are all critical perspective. A loving and supportive family, home and organizational environment gives leaders the emotional stability and motivation they need to overcome problems. Maintaining strong familial and strong relationships takes time and effort, but it is critical for long-term success.

Outside of the professional world, trusted connections provide leaders with various perspectives, emotional support, and opportunity for personal growth. Making genuine connections enriches their life and strengthens their leadership skills. The world has seen extraordinary leaders use technology to drive innovation and alter industries. Today's leaders should get role clarity. A leader must understand what the core responsibilities are for his role, and what are secondary responsibilities, or even work that belongs to someone else. That won't stop people from asking them to take on additional tasks and projects. And there are certainly times when taking on additional duties may be required due to unusual circumstances or might be important for their own professional and skill development. But the most effective managers and leaders understand that they will largely be judged based on how effective they are at their core responsibilities and how they can overcome leadership challenges. This also means that there will be times when they'll have to say no. That can feel uncomfortable in a work environment. Practicing saying no and finding ways to do so with tact and professionalism are important. Turning down work that's not part of their role helps to keep them focused, and communicating effectively is a critical skill for leaders. In fact, many of these suggestions as discussed in this paper for responding to the top leadership challenges around the world are part of developing the core leadership skills they need in every role, at every stage of their career.

About Author

Hossain KA, PhD is former Head at NAME, MIST and professor/researcher/Examiner at BUET, Dhaka, Bangladesh. email: kahossain756@gmail.com

References

[1] https://fleximize.com/articles/017286/build-trust-remote-workplace, accessed on 08 Sep 2023

[2] Hossain K A, (2015), Leadership qualities for 21st century leaders, Journal of Management, Social Science and Humanities, Published on 19 May 2015, available at: http://pearlresearchjournals.org/journals/pjmssh/archive.html, accessed on 31 Jul 2023

[3] https://fleximize.com/articles/017780/modern-leadership-todays-workplace#, accessed on 08 Sep 2023

[4] DuBrin, A. J., (2000), The complete idiot's guide to leadership (2nd Edition), USA: Alpha Books, accessed on 08 Sep 2023

[5] https://peopledevelopmentmagazine.com/2023/05/16/7-best-practices-in-dei/, accessed on 04 Oct 2023

[6] https://www.ccl.org/articles/leading-effectively-articles/build-trust-in-the-workplace/, accessed on 08 Sep 2023

[7] https://www.linkedin.com/pulse/leadership-concept-its-origin-evolution-subha-minz/, accessed on 08 Sep 2023

[8] https://www.linkedin.com/pulse/leadership-concept-its-origin-evolution-subha-minz/?trackingId=wOCgRCsGRsugk9suLGlT8w%3D%3D, accessed on 13 Sep 2023

[9] https://peopledevelopmentmagazine.com/2019/02/28/enduring-inspirational-leadership/, accessed on 04 Oct 2023

[10] https://peopledevelopmentmagazine.com/2023/04/04/human-skills/, accessed on 04 Oct 2023

[11] https://peopledevelopmentmagazine.com/2021/01/15/ethical-leaders/, accessed on 04 Oct 2023

[12] James, A., (2013), Transformational vs. transactional leadership theories: Evidence in literature. 355–361, accessed on 13 Sep 2023

[13] Hossain K. A., (2015), "Essential Tips and Tactics of motivation, Journal of Management", Social Science and Humanistic, Volume 1, Issue 1, April 2015, accessed on 29 Jul 2023

[14] Men, L. R., (2014), Strategic internal communication: Transformational leadership, communication channels, and employee Satisfaction. Management Communication Quarterly, 28(2), 264–284, accessed on 13 Sep 2023

[15] https://www.shiksha.com/online-courses/articles/leadership-theories/, accessed on 13 Sep 2023

[16] https://www.linkedin.com/pulse/leadership-concept-its-origin-evolution-subha-minz, accessed on 13 Sep 2023

[17] *Hossain K. A., (2023),* Evaluation of Influence of Internet of Things (IOT) Technologies and Devices in 21 Century, Scientific Research Journal 11 (7), ISSN: 2201-2796, Jul 2023, accessed on 14 Aug 2023

[18] https://www.linkedin.com/pulse/feminist-theories-leadership-subha-minz/?trackingId=wOCgRCsGRsugk9suLGlT8w%3D%3D, accessed on 13 Sep 2023

[19] https://leadersexcellence.com/the-evolution-of-leadership/, accessed on 13 Sep 2023

[20]https://prezi.com/tfef9k7oq7ta/leadership-theories-in-chronological-order/?frame=22becd373d98df86a1536e2beb7661f85f5c6d0b, accessed on 13 Sep 2023

[21]Vroom, "Victor H., (1973), Leadership and Decision-Making, Pittsburgh: University of Pittsburgh" , accessed on 13 Sep 2023

[22] Robert J., et al, (1974), "Path-goal theory of leadership", Journal of Contemporary Business, 3: l–97", accessed on 13 Sep 2023

[23]Dienesch,R.M., et al, (1986), Leader-Member Exchange Model of Leadership: A Critique and Further Development. Academy of Management Review, 11, 618-634" , accessed on 13 Sep 2023

[24]Fiedler, F. E. et al, (1987), New Approaches to Leadership, Cognitive Resources and Organizational Performance, New York: John Wiley and Sons, accessed on 13 Sep 2023

[25] M. Lindell and G. Rosenqvist, (1992), \"Management Behavior Dimensions and Development Orientation,\" Leadership Quarterly, 1992", accessed on 13 Sep 2023

[26]Management 1991, M. Lindell and G. Rosenqvist, \"Is there a Third Management Style?\" Finnish Journal of Business Economics 3, 1992, accessed on 29 Sep 2023

[27]Ekvall G and J. Arvonen, (1992), \"Change-Centered Leadership: An Extension of the Two-Dimensional Model,\" Scandinavian Journal of Management, 1991. M. Lindell and G. Rosenqvist, \"Is there a Third Management Style?\" Finnish Journal of Business Economics 3, 1992, accessed on 29 Sep 2023

[28] https://prezi.com/tfef9k7oq7ta/leadership-theories-in-chronological-order/, accessed on 29 Sep 2023

[29] Kahn, R and D. Katz., (1960), \"Leadership Practices in Relation to Productivity and Morale,\" Group Dynamics: Research and Theory, 1960", accessed on 29 Sep 2023

[30] https://medium.com/skeptikai/the-evolution-of-leadership-51b6cae3ee0, accessed on 29 Sep 2023

[31]Stogdill, "R and A. E. Coons, Leader Behavior: Its Description and Measurement, 1951", accessed on 29 Sep 2023

[32]Vroom, "Victor H.; Yetton, Phillip W. (1973), Leadership and Decision-Making, Pittsburgh: University of Pittsburgh", accessed on 29 Sep 2023

[33]House, "Robert J.; Mitchell, T.R., (1974), \"Path-goal theory of leadership\", Journal of Contemporary Business, 3: l-97", accessed on 01 Oct 2023

[34]Dienesch, "R.M. and Liden, R.C., (1986) Leader-Member Exchange Model of Leadership: A Critique and Further Development, Academy of Management Review, 11, 618-634.", accessed on 01 Oct 2023

[35]OpcitFiedler

[36]Opcit M. Lindell

[37]Opcit Management, 1991

[38]OpcitEkvall

[39]https://www.linkedin.com/pulse/towards-theory-mentoring-relationship-conceptual-analysis-subha-minz/?trackingId=wOCgRCsGRsugk9suLGlT8w%3D%3D, accessed on 01 Oct 2023

[40]Avolio, B. J., & Bass, B. M., (1995), Individual consideration viewed at multiple levels of analysis: A multi-level framework for examining the diffusion of transformational leadership. The Leadership Quarterly, 6(2), 199–218, accessed on 01 Oct 2023

[41]Stogdill, "R and A. E. Coons, Leader Behavior: Its Description and Measurement, 1951", accessed on 2901 Oct 2023

[42] "Kahn, R and D. Katz., (1960), \"Leadership Practices in Relation to Productivity and Morale,\" Group Dynamics: Research and Theory, 1960", accessed on 01 Oct 2023

[43]Fiedler, "F. E. (1967) A Theory of Leadership Effectiveness, New York: McGraw-Hill.", accessed on 2901 Oct 2023

[44]Sagie A., (1996), Effects of leader's communication style and participative goal setting on performance and Attitudes, Human Performance, 9(1), accessed on 01 Oct 2023

[45]https://www.timetoast.com/timelines/leadership-theories-4d43452c-70c6-4791-ab69-2c30af2b8d90,accessed on 01 Oct 2023

[46] Blake, R. R. and J. S. Mouton, (1964), The Managerial Grid, 1964, accessed on 01 Oct 2023

[47] Adair, J. K., (2006), Leadership and motivation: The fifty-fifty rule and the eight key principles of motivating others. UK: Kogan Page Limited, accessed on 01 Oct 2023

[48] Turner N., et al, (2002).Transformational leadership and moral reasoning. The Journal of Applied Psychology, 87(2), 304–11,accessed on 01 Oct 2023

[49] Williams, C. (2006), Management (4th Eds),Cengage Learning,accessed on 01 Oct 2023

[50] https://blog.krauthammer.com/21st-century-leadership#,accessed on 02 Oct 2023

[51] https://www.blinkist.com/en/books/orientalism-en,accessed on 02 Oct 2023

[52]Freedman, L., (2017), *The future of war*. London: Penguin Books,accessed on 02 Oct 2023

[53]Freedman, L., (2020), Command: Individual or collective? A review of Anthony King's Command: The twenty-first century general (Cambridge: Cambridge University Press, 2019). *International Journal of Politics, Culture and Society*, 33, 105–111,accessed on 02 Oct 2023

[54]Iansiti, M., &Lakhani, K. R., (2020), *Competing in the age of AI: strategy and leadership when algorithms and networks run the world*, Boston, MA: Harvard Business Review Press,accessed on 02 Oct 2023

[55]Grint, K., (1997), Introduction: reading Tolstoy's wave. In K. Grint (Ed.), *Leadership: classical, contemporary, and ceiticalapproches* (pp. 1–18). New York: Oxford University Press,accessed on 02 Oct 2023

[56]Kangas, A., et al, (2019), Introduction: Leadership for dealing with complex changes. In A. Kangas, J. Kujala, A. Heikkinen, A. Lönnqvist, H. Laihonen, & J. Bethwaite (Eds.), *Leading Change in a Complex World: Transdisciplinary Perspectives* (pp. 7–23), Tampere: Tampere University Press,accessed on 02 Oct 2023

[57]Drucker, P. (1988) *Management*. London: Heineman,accessed on 02 Oct 2023

[58] https://www.blinkist.com/en/books/on-war-en,accessed on 02 Oct 2023

[59]Betz, D., (2019), Citadels and marching forts: How non-technological drivers are pointing future warfare towards techniques from the past. *Scandinavian Journal of Military Studies*, 2(1), 30–41,accessed on 02 Oct 2023

[60]Collinson, D., (2011), Critical leadership studies, In A. Bryman, D. Collinson, K. Grint, B. Jackson, & M. Uhl-Bien (Eds.), *The SAGE Handbook of Leadership* (pp. 181–194). London,accessed on 02 Oct 2023

[61] https://www.amazon.com/Military-Leadership-Century-Science-Practice/dp/9814352640,accessed on 02 Oct 2023

[62]Collinson, D., (2014), Dichotomies, dialectics and dilemmas: New directions for critical leadership studies? *Leadership*, 10(1), 36–55,accessed on 02 Oct 2023

[63]Collinson D., et al, (2018), 'No more heroes': Critical perspective on leadership romanticism. *Organization Studies*, 39(11), 1625–1647,accessed on 02 Oct 2023

[64]Cullen-Lester, K. L., et al, (2016). Collective and network approaches to leadership: Special issue introduction. *The Leadership Quarterly*, 27(2), 173–180,accessed on 02 Oct 2023

[65]du Gay, P., et al, (2018), *For Formal Organization: The Past in the Present and Future of Organization Theory*. Oxford: Oxford University Press,accessed on 02 Oct 2023

[66] https://press.armywarcollege.edu/cgi/viewcontent.cgi?article=2562&context=parameters,accessed on 02 Oct 2023

[67] https://apps.dtic.mil/sti/pdfs/ADA368441.pdf,accessed on 02 Oct 2023

[68]https://books.google.com.bd/books/about/Military_Leadership_in_the_21st_Century.html?id=pIC_XwAAC AAJ&redir_esc=y,accessed on 02 Oct 2023

[69]https://www.researchgate.net/publication/344412378_COMBAT_LEADERSHIP_IN_21_ST_CENTURY,accessed on 02 Oct 2023

[70] https://czasopisma.marszalek.com.pl/images/pliki/ppsy/51/ppsy202227_3.pdf,accessed on 02 Oct 2023

[71] https://ak7cav.in/pdf/MILITARY-LEADERSHIP-%2021ST-CENTURY.pdf,accessed on 02 Oct 2023

[72]Keegan, J., (2004), *The mask of command: A study of generalship*. London: Pimlico, Original work published 1987.,accessed on 02 Oct 2023

[73]King, A. (2019). *Command: The twenty-first-century general*. Cambridge: Cambridge University Press. DOI: https://doi.org/10.1017/9781108642941,

[74]Klein, G. (2017, february 7), Overcoming complexity through collaboration and follower-based leadership. *Small Wars Journal*,accessed on 02 Oct 2023

[75]Manville, B. (2016, August 7). Stanley McChrystal takes network war to the corporate sector. *Forbes,*

[76] https://www.blinkist.com/en/books/high-performance-habits-en,accessed on 03 Oct 2023

[77]https://www.blinkist.com/en/books/goals-en-zig-ziglar,accessed on 03 Oct 2023

[78]McChrystal, S., et al, (2015), *Team of Teams: New rules of engagement for a complex world*. New York: Penguin Publishing Group,accessed on 03 Oct 2023

[79] https://www.blinkist.com/en/books/stop-walking-on-eggshells-en,accessed on 03 Oct 2023

[80]Meindl, J. R. (1995). The romance of leadership as a follower-centric theory: A social constructionist approach. *The Leadership Quarterly*, 6(3), 329–341,accessed on 03 Oct 2023

[81] https://www.blinkist.com/en/books/the-wealth-of-nations-en,accessed on 03 Oct 2023

[82]Ospina, S. M. (2016). Collective leadership and context in public administration: Bridging public leadership research and leadership studies. *Public Administration Review*, 77(2), 275–287,accessed on 03 Oct 2023

[83] https://www.blinkist.com/en/books/freakonomics-en,accessed on 03 Oct 2023

[84] Rosenhead, J. (1998). *Complexity theory and management practice* (Working Paper Series LSEOR 98.25). London: Department of Operational Research, London School of Economics,accessed on 03 Oct 2023

[85] Rosenhead, J., et al, (2019), Complexity theory and leadership practice: a review, a critique, and some recommendations. *The Leaderhip Quarterly*, 30(5), 1–25,accessed on 03 Oct 2023

[86] https://www.blinkist.com/en/books/the-black-swan-en,accessed on 03 Oct 2023

[87] Schneider, M., & Somers, M., (2006), Organizations as complex adaptive systems: Implications of complexity theory for leadership research. *The Leadership Quarterly*, 17(4), 351–365,accessed on 03 Oct 2023

[88] Uhl-Bien, M., & Arena, M., (2017), Complexity leadership: Enabling people and organizations for adaptability. *Organizational Dynamics*, 46(1), 9–20,accessed on 03 Oct 2023

[89] hl-Bien M., (2009), Complexity leadership in bureaucratic forms of organizing: A meso model. *The Leadership Quarterly*, 20(4), 631–650,accessed on 03 Oct 2023

[90] White, L., et al, (2016), Pluralized leadership in complex organizations: Exploring the cross network effects between formal and informal leadership relations. *The Leadership Quarterly*, 27(2), 280–297,accessed on 03 Oct 2023

[91] https://www.blinkist.com/en/books/the-big-picture-en,accessed on 03 Oct 2023

[92] https://www.blinkist.com/en/books/merchants-of-doubt-en,accessed on 03 Oct 2023

[93] Wong, L., andGerras, S., (2017, February 15). Beware of the romance of leadership. *War On the Rocks,*accessed on 03 Oct 2023

[94] Yammarino, F., et al, (2012), Collectivistic leadership approaches: Putting the "We" in leadership science and practice. *Industrial and Organizational Psychology*, 5(4), 382–402,accessed on 03 Oct 2023

[95] https://www.blinkist.com/en/books/life-3-dot-0-en,accessed on 03 Oct 2023

[96] Zinni, T., &Kolz, T., (2009), *Leading the charge: leadership lessons from the battlefield to the boardroom.* Basinstoke: Palgrave Macmillan,accessed on 03 Oct 2023

[97] Yammarino, F., et al, (2012), Collectivistic leadership approaches: Putting the "We" in leadership science and practice. *Industrial and Organizational Psychology*, 5(4), 382–402,accessed on 03 Oct 2023

[98] https://www.blinkist.com/en/books/23-things-they-dont-tell-you-about-capitalism-en,accessed on 03 Oct 2023

[99] https://www.blinkist.com/en/books/the-ascent-of-money-en,accessed on 03 Oct 2023

[100] https://www.blinkist.com/en/books/primed-to-perform-en,accessed on 03 Oct 2023

[101] https://www.blinkist.com/en/books/economic-facts-and-fallacies-en,accessed on 03 Oct 2023

[102] https://www.blinkist.com/en/books/the-general-theory-of-employment-interest-and-money-en,accessed on 03 Oct 2023

[103] https://www.blinkist.com/en/books/nike-going-public-en,accessed on 03 Oct 2023

[104] LIMS, (2023), Nobody always sees the whole pictures, our AI do; available at: www.lmis.de/im-wandel-der-zeit-von-industrie-1-0-bis-4-0,accessed on 15 Aug 2023

[105] *Hossain, K. A., (2023), An overview of merchant ships, International Journal of Novel Research and Development (IJNRD), Vol 8, Issue 6, June 2023, ISSN 2456-4184,* accessed on 13 Aug 2023

[106] *Hossain, K. A., (2023),* An Overview of Naval Ships, Scientific Research Journal (SCIRJ) 11 (6), ISSN: 2201-2796, June 2023, accessed on 15 Aug 2023

[107] Stiemerling, (2015), 'KünstlicheIntelligenz' – AutomatisierunggeistigerArbeit, Big Data und das Internet der Dinge', Computer und Recht 762 ff,accessed on 15 Aug 2023

[108] Forschungsunion and acatech, (2013), 'DeutschlandsZukunftalsProduktionsstandortsichern: Umsetzungsempfehlungfür das ZukunftsprojektIndustrie 4.0', PromotorengruppeKommunikation der ForschungsunionWirtschaft – Wissenschaft,accessed on 15 Aug 2023

[109] Arbeitsmarkt und Wirtschaft, (2015), Industrie 4.0 und die Folgenfür IAB Forschungsbericht 8/2015, Institute for Employment Research, 12,accessed on 15 Aug 2023

[110] SandroPanagl,(2015), 'Digitalisierung der Wirtschaft - BedeutungChancen und Herausforderungen', Austrian Economic Chambers 5,accessed on 15 Aug 2023

[111] *Hossain, K. A., (2023), Technological advancement and future of warship building, International Journal of Research and Development (IJNRD), Vol 8, Issue 5, May 2023, ISSN 2456-4184,* accessed on 13 Aug 2023

[112] Bloomberg, (2016), available at: www.bloomberg.com/news/videos/2016-05-20/forward-thinking-march-of-the-machines,accessed on 15 Aug 2023

[113] Housman, M., (2018), Why 'Augmented Intelligence' Is a Better Way to Describe AI, AINews, 2018, accessed on 27 Aug 2023

[114]Jordan, M.I.; Mitchell, T.M. Machine learning: Trends, perspectives, and prospects. Science 2015, 349, 255–260

[115]Nebula Ai (NBAI)—Decentralized AI Blockchain Whitepaper, Montreal, QC, Canada: Nebula AI Team, 2018

[116]Unified architecture for machine learning in 5G and future networks, Technical Specification TU-T FG-ML5G-ARC5G, January 2019, accessed on 27 Aug 2023

[117]https://www.pewresearch.org/internet/2018/12/10/artificial-intelligence-and-the-future-of-humans/, accessed on 23 June 2023

[118] https://www.emerald.com/insight/content/doi/10.1108/BPMJ-10-2019-0411/full/html, accessed on 23 June 2023

[119] https://www.sciencedirect.com/science/article/abs/pii/S1544612323003355, accessed on 23 June 2023

[120] https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3661469, accessed on 23 June 2023

[121] http://tony-silva.com/eslefl/miscstudent/downloadpagearticles/AIhumanfuture-pew.pdf, accessed on 23 June 2023

[122] https://www.sciencedirect.com/science/article/abs/pii/S0264837719317302, accessed on 23 June 2023

[123] https://www.mdpi.com/1660-4601/20/5/4541, accessed on 23 June 2023

[124] https://discover.bot/bot-talk/role-of-artificial-intelligence-in-education/, accessed on 23 June 2023

[125] https://itchronicles.com/artificial-intelligence/ai-in-education/, accessed on 23 June 2023

[126]https://www.thedailystar.net/recovering-covid-reinventing-our-future/blueprint-brighter-tomorrow/news/the-economic-impacts-the-4ir-bangladesh-2960641, accessed on 24 June 2023

[127] https://nntc.digital/blog/4ir-how-to-exploit-the-fourth-industrial-revolution/,accessed on 24 June 2023

[128]Kurzweil Ray, (2005), The Singularity is Near: When Humans Transcend Biology. New York: Viking. ISBN 978-0-670-03384-3, accessed on 27 Aug 2023

[129]Harris Karen, et al, (2018), "Labor 2030: The Collision of Demographics, Automation and Inequality," Bain and Company Reports, accessed on 27 Aug 2023

[130]*Hossain, K. A., (2023),* Evaluation of Influence of Internet of Things (IOT) Technologies and Devices in 21 Century, Scientific Research Journal 11 (7), ISSN: 2201-2796, Jul 2023, accessed on 14 Aug 2023

[131]*Hossain, K. A., (2023),*The Potential and Challenges of Quantum Technology in Modern Era, Scientific Research Journal 11 (6), Jun 2023, accessed on 16 Aug 2023

[132]Apthorpe, N., et al, (2019), Keeping the smart home private with smart(er) IoT traffic shaping, Proceedings on Privacy Enhancing Technologies, 2019 (3): 128–148,accessed on 03 Oct 2023

[133]*Hossain, K. A., (2023),*The Potential and Challenges of Quantum Technology in Modern Era, Scientific Research Journal 11 (6), Jun 2023, accessed on 16 Aug 2023

[134]https://www.mdpi.com/journal/IoT, accessed on 31 May 2023

[135]Desai, B.C., (2017), IoT: imminent ownership threat. In Proceedings of the 21st International Database Engineering & Applications Symposium, 82–89, accessed on 27 Aug 2023

[136] What is IoT: The Internet of Things explained | McKinsey.https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-the-internet-of-things, accessed on 31 May 2023

[137]http://it-in-industry.org/index.php/itii/article/view/702,accessed on 31 May 2023

[138] https://bdtechtalks.com/2018/08/30/race-between-humans-and-artificial-intelligence/, accessed on 23 Sep 2023

[139] https://www.business-standard.com/article/current-affairs/robots-will-outsmart-humans-by-2029-11-years-earlier-than-expected-hp-cto-117091300177_1.html, accessed on 23 Sep 2023

[140]Hossain K A, (2023), Analysis of Present and Future Use of Artificial Intelligence (AI) in Line of 4th industrial Revolution (4IR), Scientific Research Journal 11 (8), ISSN: 2201-2796, Aug 2023, accessed on 14 Aug 2023

[141]*Hossain, K. A., (2023),* Evaluation of Influence of Artificial Intelligence (AI) on Technologies in 21st Century, Journal of Eiectronics and Communication Engineering Research, Quest Journal, accessed on 15 Aug 2023

[142]Johnny ChLok,(2019), Artificial Intelligence Future Ten Development Stages, Independently Published,ISBN:9781671040670, 1671040678,accessed on 03 Oct 2023

[143]Korinek, Anton and Joseph E. Stiglitz (2019), "Artificial Intelligence and Its Implications for Income Distribution and Unemployment," in Agrawal et al.: *The Economics of Artificial Intelligence*, NBER and University of Chicago Press,accessed on 03 Oct 2023

[144]*Hossain, K. A., (2023),* Evaluate the Mystery of Creation of Universe and Existence of Antimatter Dark Matter and Dark Energy, International Journal of Current Science Research and Review 6 (6), Jun 2023, accessed on 16 Aug 2023

[145]Hossain K A, (2023), Analysis of Present and Future Use of Artificial Intelligence (AI) in Line of 4th industrial Revolution (4IR), Scientific Research Journal 11 (8), ISSN: 2201-2796, Aug 2023, accessed on 14 Aug 2023

[146] https://nagalandpost.com/index.php/meta-scientist-yann-lecun-dismisses-ai-threat-to-humanity/, accessed on 17 June 2023

[147]Johnny ChLok, (2020), Artificial Intelligence How Impacts Global Economy, Independently Published,ISBN:9781661685263, 1661685269, accessed on 30 Aug 2023

[148]Pablo Padula, (2023), Are You Going to Lose Your Job to Artificial Intelligence?, Amazon Digital Services LLC - Kdp, ISBN:9798391007401, accessed on 30 Aug 2023

[149]Alexander J. Means, et al, (2020), Education and Technological Unemployment,Springer Nature Singapore, ISBN:9789811362255, 9811362254, accessed on 30 Aug 2023

[150]www.quora.com/Will-machines-replace-humans-If-yes-when, accessed on 25 Sep 2023

[151]https://time.com/6283958/darwinian-argument-for-worrying-about-ai/, accessed on 25 Sep 2023

[152] https://peopledevelopmentmagazine.com/2023/05/16/7-best-practices-in-dei/, accessed on 04 Oct 2023

[153] https://www.forbesindia.com/article/thunderbird/what-is-global-leadership/82793/1, accessed on 04 Oct 2023

[154]*Hossain K. A., (2023),* Evaluation of Influence of Artificial Intelligence (AI) on Technologies in 21st Century, Journal of Eiectronics and Communication Engineering Research, Quest Journal, accessed on 15 Aug 2023

[155] https://www.notredamecoll.ac.uk/news/will-robots-replace-teachers-zufar-hussain,accessed on 29 Sep 2023

[156] https://www.youtube.com/watch?app=desktop&v=1n1mzVoivL8, accessed on 03 Oct 2023

[157]*Hossain, K. A., (2023),* Evaluate the Mystery of Creation of Universe and Existence of Antimatter Dark Matter and Dark Energy, International Journal of Current Science Research and Review 6 (6), Jun 2023, accessed on 16 Aug 2023

[158] https://martinroll.com/resources/articles/leadership/leadership-in-the-21st-century/,accessed on 05 Oct 2023

[159] https://martinroll.com/resources/articles/leadership/leadership-in-the-21st-century/,accessed on 05 Oct 2023

[160]*Hossain, K. A., (2023), Evaluation of global and local ship designing software trend and way forward, Global Scientific Journals (GSJ), Vol 11, Issue 5, May 2023, ISSN 2320-9186,* accessed on 13 Aug 2023

[161]Zerfass, A., & Huck, S., (2007), Innovation, communication, and leadership: New developments in strategic communication. International Journal of Strategic Communication, 1(2), 107–122,accessed on 05 Oct 2023

[162]Rost, J. C., (1993), Leadership for the twenty-first century. Greenwood Publishing Group,accessed on 05 Oct 2023

[163] Littlejohn, S. W. & Foss, K. A., (2010), Theories of Human Commnunication (10th Eds.), Waveland Press, Inc,

[164]Fossum. L. B., (1989), Understanding organizational change: Converting theory to practice US: Thomson Crisp Learning,accessed on 05 Oct 2023

[165] Beebe, S. A. & Masterson, J. T., (2011), Communicating in small groups: Principles and practices (10th Eds.), Pearson,accessed on 05 Oct 2023

[166] De Vries, R. E., et al, (2010), Leadership= communication? The relations of leaders' communication styles with leadership styles, knowledge sharing and leadership outcomes. Journal of Business and Psychology, 25(3), 367–380,accessed on 05 Oct 2023

[167]Kouzes, J. M., et al (1993), Leadership practices inventory: A self-assessment and analysis. San Francisco,

[168] Eisenberg, E. M., (2006), Strategic ambiguities: Essays on communication, organization, and identity. SAGE Publications,accessed on 05 Oct 2023

[169] Gibb, J., (1961), Defensive communication. The Journal of Communication, 11, 141-148,accessed on 05 Oct 2023

[170] Daniels, T. D., et al, (1997), Perspective on organizational communication (4th Eds.), Brown & Benchmark Publishers,accessed on 05 Oct 2023

[171] Ibid

[172] Mai, R. &Akerson, A., (2003),The leader as communicator – Strategies and tactics to build loyalty, focus effort, and spark Creativity. New York: AMACOM,accessed on 05 Oct 2023

[173] https://servetolead.com/21st-century-leadership-vs-20th-century-leadership/,accessed on 05 Oct 2023

[174] Block, P. (1993). Stewardship: Choosing Service Over Self-Interest. San Francisco: Berrett-Koehler,

[175]Chaleff, I. (1995). The courageous follower: Standing up to and for our leaders. San Francisco: BerrettKoehler,accessed on 05 Oct 2023

[176] Goldstein, J., (1993),Revisioning the Organization: Chaos, Quantum Physicals and OD - An Interview with Margaret Wheatley. Organizational Development Journal, 2(2),accessed on 05 Oct 2023

[177] Connor, D., (1995),Managing at the speed of change: How resilient managers succeed and prosper where others fail. New York: Villard,accessed on 05 Oct 2023

[178] Greenleaf, R. K., (1991),The Servant as Leader. Indianapolis: The Robert K. Greenleaf Center,accessed on 05 Oct 2023

[179]Janov, J., (1994),The Inventive Organization: Hope and Daring at Work. San Francisco: Jossey-Bass.,accessed on 05 Oct 2023

[180] Kelley, R. E., (1992),The power of followership: How to create leaders people want to follow, and followers who lead themselves. New York: Doubleday/Currency,accessed on 05 Oct 2023

[181]Naisbitt J., (1986), Re-Inventing the Corporation, New York: Warner Books, accessed on 05 Oct 2023

[182] Palmer, P., (1994), "Leading From Within: Out of the Shadows and Into the Light." In J. Conger (Ed.), Spirit at Work, San Francisco: Jossey-Bass, accessed on 05 Oct 2023

[183] Peck, M. S. (1987). The Difference Drum: Community Making and Peace. New York: Simon & Schuster

[184]Rost, J. C., (1994), "Leadership Development in the New Millennium." The Journal of Leadership Studies, 1(1), 91-110,accessed on 05 Oct 2023

[185]Wheatley, M. J., et al, (1996),A simpler way. San Francisco: Berrett-Koehler,accessed on 05 Oct 2023

[186]Senge, P. M., (1990),The Fifth Discipline: The Art and Practice of a Learning Organization. New York: Doubleday,accessed on 05 Oct 2023

[187] Wheatley, M. J. (1992). Leadership and the New Science: Learning About Organizations from an Orderly Universe. San Francisco: Berrett-Koehler,accessed on 05 Oct 2023

[188] https://www.effectory.com/knowledge/leadership-21st-century/,accessed on 05 Oct 2023

[189] https://www.effectory.com/products/,accessed on 05 Oct 2023

[190] https://www.harvardonline.harvard.edu/course/strategy-execution-public-leadership?,accessed on 06 Oct 2023

[191] https://www.ccl.org/articles/leading-effectively-articles/top-6-leadership-challenges/, accessed on 07 Oct 2023

[192] https://www.linkedin.com/pulse/how-respond-leadership-challenges-around-world-robert-ford/, accessed on 07 Oct 2023

[193]https://ilaglobalnetwork.org/books_/peace-reconciliation-and-social-justice-leadership-in-the-21st-century/,accessed on 06 Oct 2023

[194] https://www.researchgate.net/publication/304743006_Leadership_in_the_21st_Century,accessed on 06 Oct 2023

[195] https://www.youthdoit.org/capacity-strengthening-tools/,accessed on 06 Oct 2023

[196] https://www.youthdoit.org/themes/youth-friendly-services/getting-support/,accessed on 06 Oct 2023

[197] https://www.mindtools.com/a4wo118/smart-goals,accessed on 06 Oct 2023

[198] https://www.academia.edu/40475746/21St_Century_Leadership_new_1_,accessed on 06 Oct 2023

[199] https://www.academia.edu/42878602/How_can_we_make_sense_of_leadership_in_the_21st_century,accessed on 06 Oct 2023

[200] https://www.azquotes.com/author/97151-James_M_Strock,accessed on 06 Oct 2023

[201] https://servetolead.com/category/21st-century-communication/,accessed on 06 Oct 2023

[202] https://servetolead.com/serve-to-lead-blog/,accessed on 06 Oct 2023

[203] https://servetolead.com/tag/information-age/,accessed on 06 Oct 2023

[204] https://www.azquotes.com/quotes/topics/office.html,accessed on 06 Oct 2023

[205] https://servetolead.com/books/servant-leadership-quotations/,accessed on 06 Oct 2023

[206] https://www.azquotes.com/quotes/topics/president.html,accessed on 06 Oct 2023

[207]https://www.academia.edu/63077572/A_new_approach_to_assessing_leadership_dimensions_styles_context,

[208] https://servetolead.com/pope-francis-life-is-measured-by-love/,accessed on 07 Oct 2023

[209] https://www.coachhub.com/blog/modern-leadership-styles-their-effect-on-well-being/, accessed on 08 Oct 2023

[210] https://www.mdi-training.com/blog/blog/5-characteristics-of-modern-leadership/, accessed on 08 Oct 2023

[211] https://www.linkedin.com/pulse/leadership-titles-positions-flowcharts-mohammed-aldossary-assoc-cipd/, accessed on 08 Oct 2023

[212] https://www.agateno.com/the-leadership-of-the-future-the-leader-as-relationship-manager/, accessed on 08 Oct 2023

[213] https://www.linkedin.com/pulse/how-respond-leadership-challenges-around-world-robert-ford/, accessed on 08 Oct 2023

[214] https://www.ccl.org/articles/leading-effectively-articles/fundamental-4-core-leadership-skills-for-every-career-stage/, accessed on 08 Oct 2023

[215] https://www.ccl.org/articles/leading-effectively-articles/communication-1-idea-3-facts-5-tips/, accessed on 08 Oct 2023

[216] https://www.octanner.com/global-culture-report#2020, accessed on 18 Oct 2023

[217] https://www.thegrowthfaculty.com/blog/modernleader, accessed on 18 Oct 2023

[218] https://councils.forbes.com/profile/Steve-Shillingford-CEO-Deepsee-ai/d67627e4-422f-4cfe-910a-9d7a6ea8795f, accessed on 08 Oct 2023