

Research Article

Leadership Challenge For Future Digital World Management

Dr. Dilip Nandkeolyar

Co-Chancellor, Commonwealth University, London, UK &
Director Industry Research and HoD - Marketing, Universal Business School, Karjat, India

ABSTRACT

We add a digital device every day that enables everyone achieve and prosper, as part of its commitment to a growth-driven global economy that will face inflation and provide limitless spending to everyone. Without a question, we have achieved grandeur, but our glorious achievements will be matched by the increasing crisis of success. As we chase unrestricted expansion, we risk warming the climate, depleting our financial resources, requiring more fresh water than what we have, rising income inequality, extinction of other species, and causing shockwaves whenever we are unable of dealing with a problem. Millions of individuals are living at the "bottom" of the economic ladder. In advanced societies, the middle class is becoming obsolete. Many people no longer feel that today's leaders can improve this, despite their increased power and use of digital technology. Leaders, like everyone else, desire additional choices. It appears that there is room to fantasize about a better future with new technology.

KEY WORDS: World economic forum, digital technology, human and AI, digital leader, management.

1. INTRODUCTION

In business, society, and every area of our lives, the digital revolution [1] has opened a new era of human [2] empowerment and engagement. The ramifications of this transition on society are enormous, and they are significantly altering our leadership responsibilities, whether that is in politics, business, education, or as parents raising children.



Figure 1: Digital Leader of digital world (source: google search)

Leading in the new digital world [3]-[5] is akin to walking a tight rope. Electronic gadgets provide enormous value by allowing us to communicate, collaborate, and stretch our minds raising awareness about important topics, bringing people together for a similar goal, and breaking new ground. However, these same technologies [5] can make people feel alone and detached, leaving them open to cybercriminals' evil intent and, as we've seen recently, even terrorist action Users' capacity to achieve their desire for social connection, entertainment, and learning is nearly equivalent to the danger of cognitive, emotional, and behavioural [2] development damage, as well as mental health difficulties.



Figure 2: Digital world (*Google search*)

At either end of the scale, digital technology is immensely strong, and leaders [6] have a greater sense of responsibility to respond to the clear message.

In the past, media transmitted information which included a wide, comprehensive range of content that viewers might use to get a complete picture of the news.

That is no longer the case, with consumers demanding (and customising) content that reflects their worldview [7]-[9].



Figure:3 Digital leaders of digital world (*Google search*)

Leadership Challenge For Future Digital World Management

As a result, we now live in a new world in which opinion is fact and truth is debatable. This revolution in how individuals receive information has undoubtedly shaped people's perspectives and altered how we act. This difference shows that our daily digital contacts have a major, if not dominant, impact on our perceptions and decision-making. Despite this, we still know very little about how digital technology affects human behavior[10]-[12]. Understanding the impact of digital technology in creating culture and behaviour, and how to use it to your benefit, is the source of future effective leadership [13].

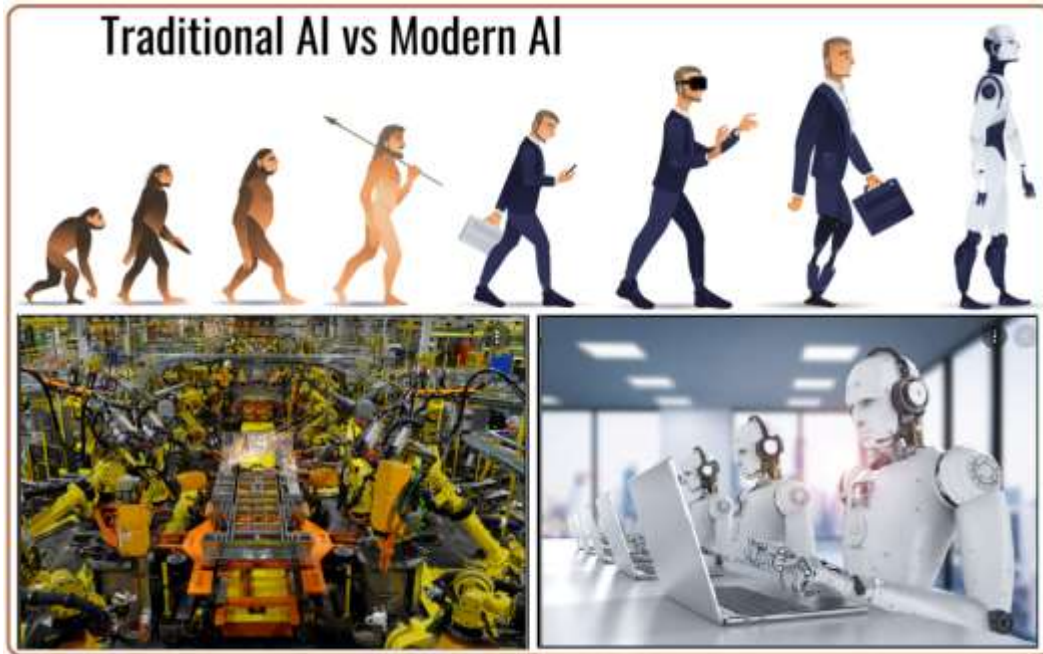


Figure 4: Digital transformation with Human Vs AI (*Google search*)

"You either disrupt or are disrupted," as the World Economic Forum in Davos put it. This remark correctly places pressure on leaders to change ahead of the game, not just with it. CEOs, world leaders, teachers, and parents must all be change agents and take responsibility for instilling an innovation transformation and mentality [14] as well as providing a thoughtful and fruitful digital experience for people who use it. They are in charge (and often love).



Figure 5: AI replacing Human (*Google search*)

Leaders must be the earliest adopters of digital trends and grow comfortable with someone being uncomfortable, whether it's communicating with colleagues using the latest social media tool, engaging with your children, rewriting obsolete regulations, or simply reading emerging research. Leaders must accept that the digital environment [15] is one of empowered, personalised experiences with no boundaries or titles. Digital transformation is varied and inclusive by nature, and when properly cultivated, it can provide leaders with limitless opportunity to harness innovation, solve issues, share information, and learn from others.

Hierarchy has no place here with the inevitable advancement of artificial intelligence, human workers are being displaced by a digital workforce. It's not just about physical robots and self-driving cars; it's also about software agents that perform everyday tasks with increasing cognitive abilities as they "learn" by doing. As previously stated, digital influences a wide range of emotions, experiences, and behaviours, and no one is immune to its influence. Leaders [16] – and everyone – must remember what and who are actually essential, set boundaries, and act accordingly in the midst of all that noise. Many others will not be able to make the voyage. Those who do, however, will discover a transformative, hyper-connected world brimming with unimaginable possibilities. The new territory is unknown and dangerous. Digital technology, on the other hand, can become the greatest gift we make to our international community if we dive in with courage, respect, and care.

1.2 Strategies for the digital leader:

We're talking about technologies and disruptions when we talk about digital transformation. We like to remind ourselves that "digital" is more than that; "digital" opens up more possibilities for businesses than just information technology. The concept of digital leadership appeals to us because it is more wide and inclusive. As technologists, businessmen, and leaders, we must adopt the following attitude that emphasises corporate and personal transparency and accountability more now than ever.

Digital inclusion and digital responsibility are two subjects that we believe are important to consider as part of the digital transformation process. Digital inclusion involves making sure everybody has access to technology, the Internet, and necessary services such as health, energy, safe drinking water, and education. As we embark on our digital adventures, digital accountability entails being aware of and

helping the environment, the globe, and sustainability [17]. We see this as a chance to elevate the conversation to transformational marketing when coupled with digital transformation.

In these challenging times, leadership is one of the few constants. So rather than simply reacting to the disruptive changes that technology is causing all around us, digital leadership involves proactively embracing change to enthusiastically seek digital transformation. Even as the world changes, the value of leadership and people [18] remains constant. Your objectives as leaders or business haven't altered; you're still aiming for results of this case, nimble innovation, and operational excellence. This, I feel, is essential grounding. Now we can talk about "digital leadership." The most fundamental premise is that leaders must act swiftly and decisively. There isn't a single industry or business that will be unaffected by this shift. Leaders must consider how they use technology, evaluate their company culture, and examine the environment inside which they operate. They must reinvent their business operations and contemplate changing their goods, services, or even their business models.



Figure 6: Placement of digital leadership (Google search)

1.3 A framework for manufacturing transformation:

- Engaging customers, remaining connected, and creating new experiences are four points to bear in mind as you go through the same change of becoming a leader or maintain leadership [17] status.
- Empowering employees by providing access to data and insight, allowing them to make better decisions and increase productivity.
- Increasing the operating efficiency by utilizing additional connections and data, overall efficiency, and bringing predictive ability to the company.
- Evolving products or services to benefit from new sales opportunities.

This entire procedure is built on top of a technological platform. In order to digitally transform itself, the "digital enterprise" will require a platform that really can enable increased levels of automation, customization, adaption, and security.

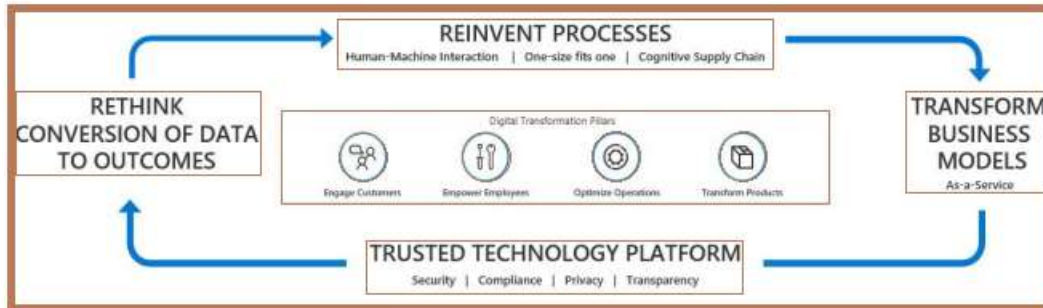


Figure 7: Framework for manufacturing transformation (*Google search*)

2. MATERIAL AND METHODS

For a long time, leadership seems to have been a matter of discussion and controversy, and it may be stated that it is always current, changing and adjusting to the demands of dynamic times. Leaders all across the world have acknowledged the need for 'digital leaders' in the current economic context, beginning with both the World Economic Forum. As human interactions and society requirements evolve and change, it is only natural that management styles shift as well. Environmental changes have had a significant impact on human undertakings. The rapid development of digital technologies, as well as the rapid rate of growth in them, has already begun to influence people's thinking. Businesses are highly susceptible to environmental changes, and digital technologies play an important role in this. The goal of this study would be to measure the effects of such technology. Organizational leadership styles evolve as a result of external forces, and digital developments have resulted in a temporary leadership [18] crisis as a result of innovative approaches and the cultural impact of social changes in businesses.

With these thoughts in mind, the following precise objectives for the research project have already been recognised:

1. A quick look at how the environment has changed as a result of technological advancements.
2. The impact of these changes on the culture and outlook of the organisation.
3. How are businesses dealing with these changes?
4. A vision for organisational development and evolution in the future.
5. Action plan suggestions and recommendations

From period to period, there is indeed a substantial volume of material on leadership development. Digital innovations [19],[20] are constantly front-page news in all management and technical publications. There was no need to conduct a separate survey to collect information necessary to answer the following research questions as there was a vast volume of available literature in print and on the web. It was necessary to organize information from multiple sources in a systematic manner that would allow for easier analysis and review. Data adequacy was discovered to be adequate for arriving at Conclusions on the above-mentioned research topics during in the process of gathering and categorizing sources of information. The information gathered has been compiled, edited, and structured appropriately to arrive at the findings listed on the following pages.

3. LITERATURE

"Digital Leaders" will be in demand in the next years. Leaders in a variety of professions have started to embrace the digital revolution and appreciate the power of game-changing technology throughout the world. Although there is a wealth of literature on leadership, only a small portion of it examines how disruptive technology might define the future leaders in today's world. Before moving on to digital leadership, let's define leadership in general and see if universal leadership characteristics apply to the

fast-changing world of disruptive technology [3]-[5]. Different decades demand different types of leadership, yet many renowned theorists argue that certain universal characteristics remain everlasting. The beautiful individual possesses a unique ability to influence others while inspiring loyalty and compliance. Even individuals with inherent charm are unable to pursue their calling in life because they must balance competing interests, maintain order, and seek consensus. According to much more integrated theoretical model, in addition to 'interior' or personal levels of leadership, there is also a 'outer' or operational level that relates towards how leaders achieve results.

There are several universal skills that are worth mentioning, such as: (1) motivational skills; (2) team building; (3) emotional intelligence. Obviously, this list isn't exhaustive, but it does highlight the important qualities for attaining greatness. Although these 'outer' characteristics have largely remained the same, there are a handful that have changed significantly as a result of technology's tremendous impact.

The effects of digital on people

We live in the world where technology is fast developing and has never had such an effect on people's lives. Politics, businesses, industries, and society, as well as our daily lives, are all being transformed by digital technology. Computer revolution has not only destroyed old, familiar organisational models, but it has also produced plenty of new issues.

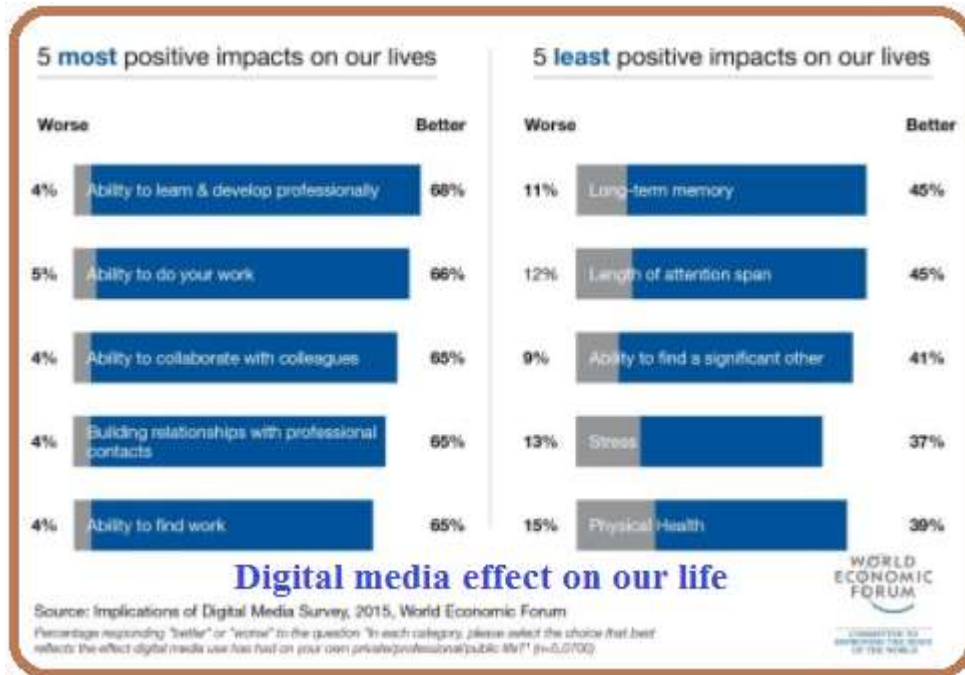


Figure 8: Digital impact on people (Google search)

Reusable rockets are a tremendous business opportunity, a source of entertainment, and, more significantly, another step toward marketing and selling outer space and, perhaps, populating other planets. Back on the ground, we didn't state that our world is changing at an incredible rate. The technology breakthrough is obvious, and examples of our new reality are everywhere. The most popular social media network (Facebook) generates no content, the fastest-growing banks (Society One) have really no additional cash, the world's largest taxi company (Uber) has no taxis, and the largest lodging provider owns no real estate (Air bnb). Today's game changers run on a completely different fuel, and they can even transform the most basic qualities of individual businesses, as the examples above demonstrate. On a conceptual level, the Digital Age - also known as the knowledge - based society or

networked society - is characterized by a number of major structural shifts that are altering leadership: (1) rapid and far-reaching scientific developments, (2) globally leading in the dynamic release of knowledge, (3) a transition from physical qualities to knowledge, and (4) more scattered, less centralized organisation formations.

The Digital Age's Impact on Leadership

Traditional talents have not been replaced; instead, they now coexist with a variety of new aspects. To begin with, digital leadership can be characterised as a leader's contributions to the shift to a knowledge society as well as their technical understanding. Leaders in the digital world have a responsibility to keep up with the global revolution. They must comprehend technology not only as a means to an end, but also as a revolutionary force. An attitude of transparency and a genuine motivation to know must drive leadership. Of course, no regulation states that leaders must be able to code or have completed a machine-learning programme, but considering the effects of breakthrough technologies is critical.

Today's leaders must be able to recognise technological [7] trends in a variety of fields, including big data, cloud computing, automation, and robotics. However, individuals must first and foremost have always had the necessary expertise and vision to make the best use of these resources.

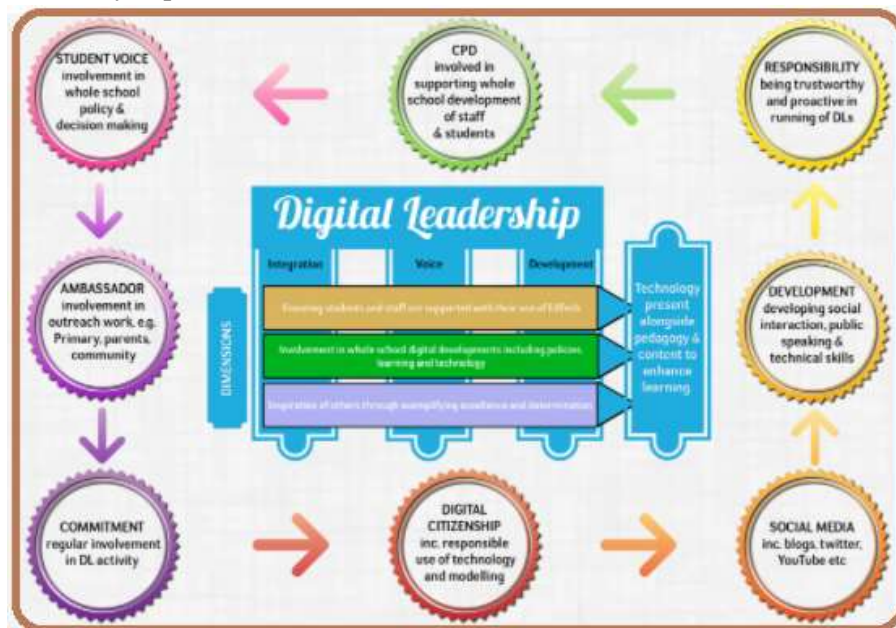


Figure 9: Models of digital leadership (Google search)

Second, what we don't know is just as significant as for what we do in a knowledge - based society. Leaders should be aware of their limitations and how to gain new skills. A potential leader will be more like a community manager than an authoritarian. These processes will, for the most part, continue to expand. As a result, the hierarchical paradigm is being phased out in favour of horizontal structures involving CEOs, leaders from other sectors, academics, and civic society representatives. In the digital age, hierarchy fails because it is cumbersome and administrative, but really the new reality is always changing and necessitates immediate responses. Power is achieved not by establishing new borders or regions of influence, but by strengthening and enlarging networks and linkages in today's globe.

Why should leaders focus on technology for the greater good?

We must turn our attention away from the threats posed by emerging technology and toward the opportunities they provide. The debate over the dangers of technologies, particularly the internet, will never be resolved. Policymakers have proposed several approaches to web regulation, but they are

Leadership Challenge For Future Digital World Management

constantly one or two steps behind. This is due to the fact that rules and regulations are stable and built to the last, meanwhile the digital environment is constantly changing.

We do not say that regulation is completely ineffective, and that we should therefore forgo any enforcement steps aimed at making the world a safer place. However, we recommend that we examine technologies via a variety of lenses. We can change the human factor, that is both beneficial and terrible in groundbreaking technology. Leaders cannot afford to demonstrate fear or hesitancy in implementing digital technology now that this has been recognised that it will play a significant role in our future. They must therefore embrace technology with a full understanding of its promise. We need to set sail for fresh and interesting regions. We decided to go to Mars since our technology allows us to at least try to explore other worlds by the 2030s.

Every day, we may choose create other fantastic things, such as self-driving cars, more powerful batteries, the Apple Watch, and drones, to mention a few.

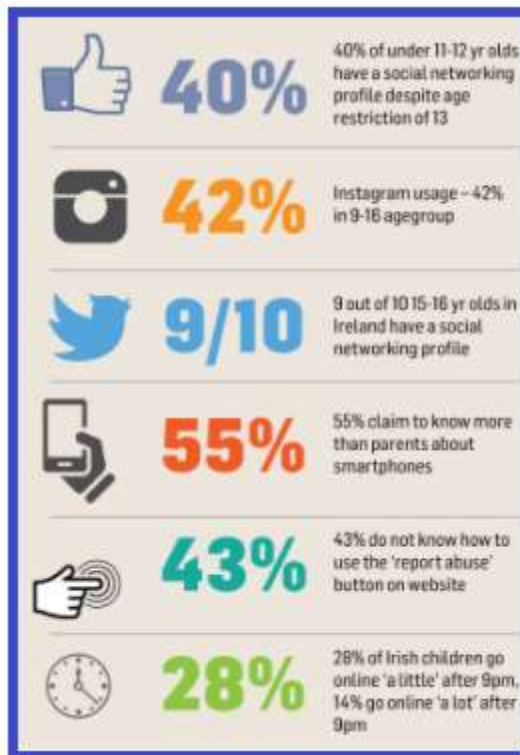


Figure 10: Use of internet impact of social media- reference to Irish people (*Google search*)

A very well mix of universal characteristics and digital leadership attributes has the capacity to lead us with hope and enthusiasm through years of transformation. Technology continues to demonstrate that technology can be used for the greater good of humanity, but only if we set sail on the correct course with the right company. Businesses, economies, and communities are all being transformed by digital media. The digital infrastructure [8] is a significant democratization factor, allowing many more people and enterprises around the world network access and markets.

As software increasingly automates jobs, the nature of employment is shifting, allowing humans to produce new sorts of value. Innovative business models providing public economy platforms and principles are emerging. Leadership entails a commitment to values, and value-based leadership, no matter how long it takes, is rewarded. Mahatma Gandhi, who is known worldwide for his principled leadership, is the clearest illustration from Indian history. It was a crisis scenario for India, which lacked

the military strength to battle and evict the British, but Gandhi's peaceful means succeeded because of his devotion to values and his personality, which drew support from all sides.

4. LEADERSHIP IN CRISIS

Every week, the chaos of the times really does seem to throw up a new disaster, throwing leaders who may be top-notch performers in normal operating condition into a complicated world and expectations — situations they are both incapable of managing and prone to making well thought and disastrous decisions in the heat of the moment. During a crisis, the organization operational models which provide the structure for a smooth-running firm become inoperative, leaving leadership in a state of uncertainty and disorder. However, if the consequences of the confusion are recognized, it can be successfully managed.



Figure 11: Process of effective leadership during crisis (*Google search*)

1. Tension and stress: Leadership are thrust into a stressful and tense environment throughout a crisis, putting them under profound psychological, mental, and physical strain. Even simple judgments made within those situations might have catastrophic consequences.
2. Quickness: Things may happen quickly at first, leaving little opportunity for deep consideration or consultation. Conflicts arise in a catastrophe, and time is the first casualty.
3. Personnel: When the clearly recognized are unavailable to respond to a crisis, unskilled and experienced leaders are compelled to wade into the confusion. In normal times, the organisation will stagnate without the right people but during a crisis the problems are accentuated exponentially.
4. Organization: Businesses and governments are really not well enough to deal with crises. The organizational structure, in fact, may be a barrier to reaction and recovery. Success will depend on the organization's ability to adapt to changing circumstances.
5. Stakeholders: The number of stakeholders will rapidly grow, bringing new methods of communication, expectations, and participants into play at the same time. Suppliers, regulators, families, customers, hospitals, and enforcement agencies will all demand time and involvement from a leader.
6. Communication: Conventional communication routes may be unavailable or overburdened, necessitating the development of new channels and protocols that must be quickly mastered.
7. Media: When a leader is in crisis, the media spotlight shines brightly on him or her, ready to report and point fingers.
8. Simplicity: In a crisis, simplification is crucial. In the end, simplicity triumphs. The more complicated a leader's crisis response becomes, the less likely it is to succeed.

In learning crisis leadership, understanding the impact of a crisis on the leader is crucial; the following lessons will help you prepare:

1. Experiential: Provide an example of a crisis that is as realistic as feasible, addressing as many of the following components as possible. Make the session's setting as realistic as feasible. They can read a book and not have the leader crisis scenario if you don't make it genuine.

2. Do your homework: Each business has its own set of challenges and leadership expectations. What causes a crisis in the Los Angeles County Department of Public Health is not the same as what causes a crisis in a huge multinational corporation. Without a thorough understanding of the organisation, teaching managing amid a crisis will inevitably reduce the workshop's effectiveness.
3. Audio And visual Aids: Make use with as many audio visual aids as possible. They can be used to dominate an audience as well as educate and entertain them.
4. Case studies: Real-life situations that illustrate a lesson and are relevant to the training organisation are invaluable.

Many Western leaders' actions could cause as much damage to international leadership as the current refugee issue or even a trade war. Aside from the brutality of their policies, they risk bolstering governments like China's and Russia's by making them appear rational, though not trustworthy. In Chinese, there was a slogan that being said, "The intelligent man builds bridges; the stupid builds walls." The US slapped tariffs of 25% on \$50 billion worth of Chinese imports. Unfortunately, that isolationist attitude extends beyond US trade policy in ways that are not just misguided, but also unethical, and they are eroding what little moral authority the West has left. When it comes to trade, China, like Canada, the European Union, and Mexico, replied immediately by imposing duties on \$50 billion dollars of US products. If such disagreements continue to escalate, they will harm people all across the world, including consumers, businesses, and workers in the United States.

However, the United States is not alone in pursuing policies that contradict long-held ideals. The new right-wing populist administration in Italy has begun to target the Roma community, with Matteo Salvini, the interior minister and deputy prime minister, turning away ships delivering rescued migrants. Hungary, for its part, has just passed the so-called Stop Soros Law, which makes any attempt by a person or non-governmental organisation to support an illegal immigrant in obtaining refuge unconstitutional. It is named after George Soros, a Hungarian-born investor and founder of the Open Society Foundations, whom Hungarian Prime Minister Viktor Orbán accuses unjustly of pushing mass immigration to destabilise European nations.

All of this points to a growing ethical leadership dilemma that could be as destructive as uncontrolled migration or even a trade war. Beyond the terrible policies it allows, it has the ability to stimulate governments like China's and Russia's, by making them appear rational, even trustworthy. The leadership crises in businesses is exacerbated by frequent disruptions brought on by technological advancements [10]-[12]. Organizational leadership must navigate such major shifts without succumbing to despair or a lack of perspective.

5. CONCLUSIONS

Environmental changes, particularly technology advancements, are often largely unpredictable, necessitating rapid and wholesale changes in organisational vision and structure. To navigate enterprises and corporations through such turbulent times and regain the trust of consumers and stakeholders, strong leadership is essential. Changes in machinery, layout, and sometimes even product planning and implementation are not as important as shifts in staff mentality and viewpoints in delivering consistent customer pleasure. The use of technological devices has increased in the workplace. Such methods have a propensity to generalise the response (sometimes the more the merrier attitude!) and are more typically used to reach a consensus instead of a long-term solution for long-term problem solving. But there is one thing that all of them have in common: they need to quickly respond before the competition catches up.

Without a doubt, organisational cultures are influenced by market demands and client perceptions. The speed with which solutions to client problems are delivered is a common example. A crisis represents a new paradigm when organisations find it extremely difficult to respond quickly. Organizational top management and leadership must play a critical and decisive role in resolving the situation. Apart from technology, it may be necessary to make cultural changes in an organisation, and aesthetic modifications will be temporary. New procedures, product development, customer service, and response time are just a few of the essential areas that need to be addressed.

Organizations are continually reorganizing and adapting to changing circumstances. Traditional techniques of leadership and management and at the company level will still not suffice, and leaders must develop new ways to motivate people and gain their loyalty to the organisation. Employees require autonomy and flexibility, while employers must remain focused on their goals. These two must eventually become congruent in order for leadership to guide the organisation toward its stated goals. This is precisely the current ecosystem's leadership dilemma. Organizations deal with these realities by rearranging work into high-powered, self-managed teams in order to accomplish the required outcomes. It is by no means simple; yet, it is the reality, and companies must adapt to it.

In a flash, the future has now become the present! The road will become even more onerous unless businesses are tuned in to this new reality. Digital devices are becoming more popular, and organizations are encouraging their staff to become more tech-savvy. Work and leisure activities are inextricably linked, and businesses must provide for flexibility in working hours to ensure that the company's goals are not damaged. New employee training, development, and recruitment require specific attention so that new recruits fit into the company culture and organisations do not fall behind in understanding their ambitions.

REFERENCES

- [1] Lomotey, R.K., Pry, J.C. Chai, C. World Wide Web (2018) 21: 7. <https://doi.org/10.1007/s11280-017-0461-1>.
- [2] Trevisani, Daniele (2017), Semiotics for Leaders: The Exa-Leadership Model for Leadership and Human Potential Development. Media lab Research, Ferrara
- [3] iCore Project. [(accessed on 1 December 2017)]. Available online: <http://www.iot-core.eu/>.
- [4] Chin, Roger (2015). "Examining teamwork and leadership in the fields of public administration, leadership, and management". Team Performance Management. 21 (3/4): 199.
- [5] Chauhan, J., & Pal, P. (2014). Implementation of Vertical Handoff between Wimax and Wifi Networks. 2(X). Retrieved from www.ijraset.com
- [6] Donald Markwell, 2013, "Instincts to Lead": On Leadership, Peace, and Education, Connor Court: Australia.
- [7] Bauer, S., Schreckling, D.(2013):Data provenance in the internet of things. EU Project COMPOSE, Conference Seminar (2013).
- [8] Miglani, E. (2014). Simulative Investigation on 3, 4 and 5 Level Discrete Wavelet Transform for Digital Video Watermarking. International Journal of Advanced Research in Computer Science and Software Engineering, 4(6), 2277. Retrieved from www.ijarcsse.com
- [9] Abhijith H V, Dakshayini M. Efficient multilevel data aggregation technique for wireless sensor networks[C]. In Circuits, Controls and Communications (CCUBE), 2013 International conference on. IEEE.

- [10] Gulati, V., & Pal, P. A. (2014). Survey on Various Change Detection Techniques for Hyper Spectral Images. *International Journal of Advanced Research in Computer Science and Software Engineering*, 4(8), 2277. Retrieved from www.ijarcsse.com
- [11] Balachander D, Rao T R, Mahesh G R F. propagation investigations in agricultural fields and gardens for wireless sensor communications[C]. In *Information Communication Technologies (ICT), 2013 IEEE Conference on*. IEEE.
- [12] Marwa Chamekh, Sadok El Asmi, Mohamed Hamdi, Tai-Hoon-Kim (2012) "IoT Based Tracking System For Supply Chain Management".
- [13] Scouller, J. (2011). *The Three Levels of Leadership: How to Develop Your Leadership Presence, Knowhow and Skill*. Cirencester: Management Books , pp. 34–35.
- [14] Zaccaro, S. J. (2007). "Trait-based perspectives of leadership". *American Psychologist*. 62 (1): 6–16.
- [15] Arvey, R. D.; Rotundo, M.; Johnson, W.; Zhang, Z.; McGue, M. (2006). "The determinants of leadership role occupancy: Genetic and personality factors". *The Leadership Quarterly*. 17: 1–20.
- [16] Greenleaf, Robert K. *Servant Leadership: A Journey Into the Nature of Legitimate Power and Greatness*. Mahwah, New Jersey: Paulist Press (published 2002).
- [17] Judge, T. A.; Bono, J. E.; Ilies, R.; Gerhardt, M. W. (2002). "Personality and leadership: A qualitative and quantitative review". *Journal of Applied Psychology*. 87 (4): 765–780.
- [18] Kickul, J.; Neuman, G. (2000). "Emergence leadership behaviors: The function of personality and cognitive ability in determining teamwork performance and KSAs". *Journal of Business and Psychology*. 15: 27–51.
- [19] Mumford, M. D.; Zaccaro, S. J.; Harding, F. D.; Jacobs, T. O.; Fleishman, E. A. (2000). "Leadership skills for a changing world solving complex social problems". *The Leadership Quarterly*. 11: 11–35.
- [20] George, J. M. (2000). "Emotions and leadership: The role of emotional intelligence". *Human Relations*. 53 (8): 1027–1055.