HUMANE AND ETHICAL DIMENSIONS OF DIGITAL TRANSFORMATION

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Introduction

The United Nations General Assembly proclaimed 'The Universal Declaration of Human Rights (UDHR)[1] in December 1948. This is the first universally accepted code of standards for human rights. It was mandated to be achieved for all people by all sovereign nations. The UDHR has been translated into more than five hundred languages and is continuing to serve as the compendium for all legislations enacted by all countries across the world. It has also facilitated negotiation and signing of about seventy treaties connected with human rights which are being applied on an enduring basis across all continents and regions. Any violation of the thirty principles set out in the UDHR are, therefore, to be construed as unethical and a crime against humanity.

The ultimate objective of any effort by any individual or an entity/agency of any form should be to do good for the targeted people and thus, render service to humanity irrespective of whether with or without deriving reasonable profit. Digital

Transformation (DT) can in no way be an exception to this cardinal principle. If this is accepted as the maxim, mandates of the UDHR must also be the guiding principles for DT. Therefore, these are also the ethical imperatives for all digital scientists and startups, engaged in designing and/or implementing solutions, as well as government and business entities adopting DT for operations and service delivery.

Unfortunately, innumerable debates have taken place to ascertain whether confidence in digital technologies can be taken for granted, albeit trust, security, privacy, and safety are the important qualitative factors for assessing success of DT. All these disparagements are there despite AI, ML and Data Analytics are helping decision making on complex and voluminous issues. And all the eight deep digital technologies are helping to design solutions for convoluted and capacious problems with considerable positive economic impacts on all stakeholders, and the societal fabric in general. However, inter alia other concerns, overwhelming dependence on an exceptionally fast-moving and integrated network of interconnected systems magnifies the impacts of failures and threatens resilience.

In this process digital technologies are gradually infringing the areas of human rights, which were hitherto not accessed by information and communication technology. Desperate attempts to gain competitive advantages through DT are also vitiating cultural environment and value systems of business entities. Seemingly there are adverse impacts on the organisational genomics of even long-lived corporations. However, more research is required to further validate these issues.

Objective

Contents of this article can better be understood if one can visualise the environment that is expected evolve in foreseeable future. Therefore, certain megatrends identified by predictive analysts will briefly be narrated to start with for appreciating the emerging environment in which DT will proliferate during

the present decade. In the light of that and above narratives in introduction segment the first objective of this article is to identify those human rights, as enshrined in the UDHR, which are most vulnerable to violation because of DT. The processes to be crafted for implementation of digital transformation and corner stones for success will be revisited. In the light of all these various humane and ethical dimensions from the perspective of solution designers and implementing organisation will be analysed. Due to limitation of words, it may not be possible to deal with all the eight deep digital technologies which may cross the boundaries of ethics and cause violation of human rights. Therefore, certain concerns arising from applications artificial intelligence (AI) and robotic process automation (RPA) will be taken up for further analyses.

The World 2030 - Nine Megatrends

Digital scientists have provided many 'innoventive' solutions for facilitating successful handling of many critical problems which hitherto were extremely challenging and incomprehensible. Case in point is applications of AI and Data Analytics for predicting natural calamities well in advance with much more accuracy than before. Demand for such solutions will increase as world is expected to face many more unprecedented challenges like that of Covid-19 Pandemic in various other aspects of life and nature's behaviour. That is why it is now a VUCAFU world, with FU being fear of unknown and unprecedentedness of crises in store for humanity.

Professor Andrew S. Winston of the University of Guelph, Canadais is an incredibly eminent psychologist. historian and predictive analyst. He has forecasted the following nine megatrends[2] the world is going to pass through till 2030. According to him these trends will badly impact daily life of all, governmental administrations and business ecosystems across the contintents. While this is subject to validations through more predictive research, readers will be able to appreciate that earlier symptoms of the following nine trends are pervasively visible even from now.

1. **Demographics*:** Mankind will add about 1 Bln. more to reach 8.5 Bln. population.

2. **Urbanisation*:** There will be more concentration of population to cities and two third of population will live in urban areas. World has started experiencing evils of urbanisation due to continuous encroachment of forests and wildlife habitats, including disruptions of waterbodies.

3. **Transparency*:** World will become even more open and less private. Far reaching impacts of social media, espionage into people's networks, habits for sharing information, and repeated data robbing by cybercriminals would increasingly tear open private and personal information of people including their habits and social behaviour.

4. **Climate Crisis*:** Faster climatic changes and extreme weather conditions would pose severe challenges. Repeated wild forest fire, melting of icebergs equivalent of thousands of square miles, ocean warming and rise of levels, temperature in certain parts of North America shooting up to 49^0 Celsius, super severe cyclones in coastal regions of the USA, India, etc. are the indicators for more severe crises to come.

5. **Resource Pressure*:** Because of the above four developments humanity will aggressively confront resource constraints. Crisis will be there for even hitherto freely available natural resources like breathable air and potable water fit for drinking.

6. **Clean Tech*:** Zero carbon technology will most certainly be demanded more! Not only there would be need for minimising carbon emissions but also pulling down of greenhouse gases form the atmosphere.

7. **Technology Shift*:** Internet of Things (IoTs) will influence the way of living life. The present author has written earlier about predictions that a common man will be under direct and indirect influences of about five and twenty IoTs respectively. There will be applications of AI-IoTs, IoTs for RPA, Industrial IoTs, IoTs for smart cities and houses, Internet of Body, Internet of Behaviour, and so on.

8. **Global Policy#:** Netizens will continue to be more open and fearless. They would ask questions on policies and processes and demand responsible actions and accountability from both business and government entities on all matters that impact common people's life.

9. **Populism#:** Having seen liberalism and trends of globalisation in 1980s the new trend would be towards nationalism, protectionism, treaties between friendly countries, etc. The rise of radicalism may not be ruled out.

    The author of this article proposes to add two more perceivable trends to those nine megatrends.

10. **World War III*:** May be fought at the cyberspace using weapons designed and inflicted across nations with advanced digital technologies. This will choke and halt large public service facilities like power distribution, healthcare services, business operations. NATO countries have recently recognised cybercriminals and their attacks as potential sources of formidable risks.

11. **Covid-19 Pandemic*:** Unprecedented crises, large scale losses of life and far-reaching negative economic and societal impacts caused by Covid-19 Pandemic will keep haunting human civilisation for more than a decade. The fear psychosis of attacks by such biological weapons may cast shadows over developmental initiatives.

Note

*The author's studies of published literature and use case reports suggest that the risks and challenges thrown by the marked trends can be predicted, proactively actioned upon, monitored, and mitigated to a certain extent by digitally designed and implemented solutions. Business entities also on their part would resort to the same to avert, face, negotiate, revive, survive, sustain, and prosper as they keep facing those risks and challenges.

\# Challenges and crises arising out of the two marked issues must have to be handled through goodwill, emotional intelligence, collaboration, and cooperation by and between political leadership groups of sovereign nations with interventions of multilateral agencies.

People First - The imperative

On the face of challenges, as delineated above, business organisation will strive every never to retain their respective competitive advantages. Digital tools, which have already been proved to be the game changers, would be the principal resources. None can wish away the probability of such tools being applied in a manner that may cause violation of fundamental human rights.

Prof. Winston has suggested that[2] *"As new technologies sweep through society and business; the change will be jarring. Those changes and pressures are part of why people are turning to populist leaders who promise solutions. Business leaders should think through what these big shifts mean for the people that make up our companies, value chains, and communities."* It is needless to repeat, that adoptions of and resource allocations for DT will gain further pace. But lot will depend on leadership teams in framing strategies for applications of digital technologies with win-win motives for all stakeholders and humanity in the ultimate analysis.

### DT and Vulnerable Articles of UDHR

It is a difficult task for an author to identify and exclude any of the thirty Articles of UDHR with the argument that those may not be directly or indirectly applicable to digital transformation. However, for establishing common understanding about the most vulnerable ones in the context of DT, the following five major Articles are briefly being quoted:

Article No.	Brief Description of Rights
Article 1	All human beings are born free and equal in dignity and rights.
Article 3	Everyone has the right to life, liberty, and security of person.
Article 12	None shall be subjected to arbitrary interference with his privacy family, home, or correspondence, nor to attacks upon his honour and reputation.
Article 28	Everyone is entitled to a social and international order in which the rights and freedom can be realised.
Article 29	Everyone shall be subject only to such limitations as are determined by law solely for the purpose of securing due recognition and respect for the rights and freedoms of others and of meeting the just requirements of morality, public order, and the general welfare in a democratic society.

Organisation of Economic Cooperation and Development (OECD) has stated in one of its documents that *"Being able to measure people's quality of life is fundamental when assessing progress of societies."* No debate and validation exercise are needed to establish the sanctity of this statement. Therefore, one of the most important yardsticks to measure the ultimate success of DT and thus Industry 4.0 at macro level should be whether more and more applications of digital technologies are improving and would continue improve quality of people's life across all societal levels and geographic regions. The most important criterion for such a judgement is whether digital technologies have been and will continue to be able to protect at least the above five fundamental human rights as enshrined in the UNO's UDHR.

Digital Transformation - The Process to be Crafted

It will be useful at this stage to revisit the process of DT right from creation, gathering and screening of data to finally adopt and proceed with application of digital tools for value generation. Instead of resorting to narratives it would be useful to understand the four-step process of DT by taking a detailed look at the following illustration.

Source: https://digitaltransformationtrends.com/digital/what-is-digital-transformation/
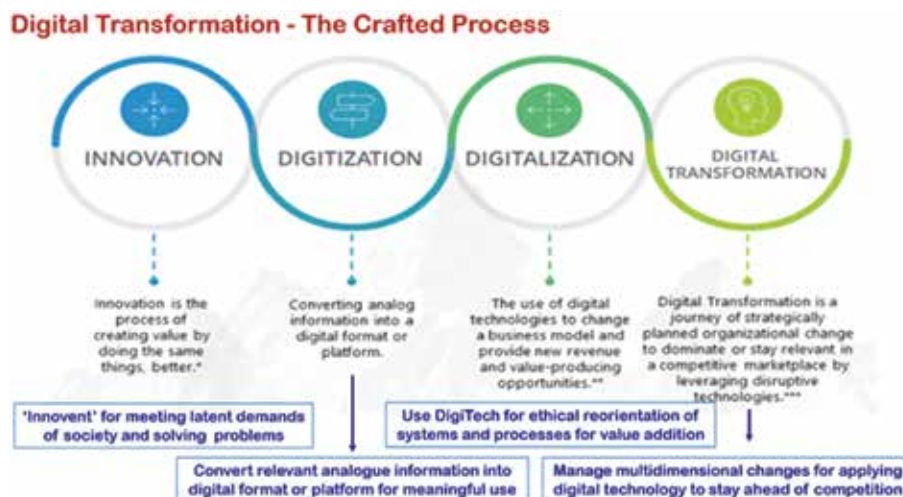
The author has added a few narratives to the graphic available at the quoted source.

One can observe from the above that adoption of DT, even after implementation of ERP, would mean an entirely new exercise which must be continued while operating in an ever-dynamic external business ecosystem. Adoption of any plan for DT without making it an integrated part of business strategies, duly aligned with the entity's vision and mission, may prove to be a decision taken and implemented with out of place contexts. Without having a well-crafted plan in place embedding digital tools into tactics for implementation of strategies may cause disaster. Both solution designers and business leaders would do well if they remember the following words of wisdom from Sun Tzu, the Chinese General, Military Strategist, Tactician, and Philosopher (544 BC to 496 BC): *"Strategy without tactics is a slow path to uncertain success. Tactics without strategy is the noise before the defeat."*

Deloitte, in one of its documents published in the Harvard Business Review[3] cautioned stating that *"Disruptive technologies create tremendous opportunity for organizations to become smarter, more agile, more flexible, and more responsive. But as employees deploy new applications, they are encountering challenges that create reputational and even financial risks for their organizations. Some companies that don't see technology as their core business may assume that these considerations are irrelevant, even as they increasingly rely on advanced digital and physical technologies to run their day-to-day operations."*

That respect for data privacy and measures for cyber security and safety are the absolute imperatives, need no overemphasis. Officials responsible for planning, conducting, and monitoring the DT journey must be extremely careful about quality, volume, relevance, privacy, and safety of data. Business leaders must have to inculcate this through a peaceful cultural revolution. Data is regarded as the new oil for Industry 4.0. But it can cause much more devastating fire than what hydrocarbon can do and harm humanity by violating several human rights. Readers might be aware of very many reported data breaches in recent past and the damages those have inflicted to the erring organisations.

Aparna Ashok[4], a Tech Anthropologist and researcher of anticipatory ethics and digital tech wrote that *"Automated decision-making models are moving from research environments to real-world environments, creating new sets of social challenges. Despite how intelligent and mathematically accurate autonomous systems may be, they run into some problems when interfaced with a world populated with unpredictable human beings. Recent examples of this include Cambridge Analytica, self-driving car crashes, security breaches at Facebook and Google."*

Digital Transformation – A Journey with Caution

The author in one of his earlier articles under this Column has written about various wrongful approaches towards digital transformation, viz., 'Me too DT', Lipstick DT, and 'One time or Once for all DT'. An organisation must not implement DT because industry peers have adopted, or for decorating the organisation with fanciful cosmetics called digital tools that would be erased or fade out over time like lipstick coats. An organisation must not adopt DT just for show casing without meaningful applications for deriving and sharing benefits therefrom with stakeholders. DT is not a one-time exercise, rather a journey for moving ahead with sustainable prosperity.

However, intrusion of ulterior motives in the process of solution designing and applications may not be ruled out in situations of top-down pressure to ensure success. Employees, while working in a dynamic environment without measures for effective surveillance and under stiff targets for achieving quantum leap in revenue and ROI, may deliberately or unknowingly resort to unethical tactics that may infringe human rights. Deloitte in one of its publications titled 'Future Risks in the Digital Era'[5] mentioned *"Unintended consequences, including the obsolescence of existing controls, complexity in operations, and the possibility of cascading errors, become top areas of concern. Misalignment between an organization's goals for digital transformation and employee values and behaviour creates new culture risks."*

Therefore, it is essential in this journey to frequently revisit the following questions, apply nuances Audit 4.0[9] techniques to find answers, and initiate corrective actions to reassure that digitally transformed systems of the company and its employees through human interventions are not:

⊙ Violating in any manner the human rights and doing injustice to humanity in any manner,

⊙ Collecting or using classified and stakeholders' sensitive data without their knowledge and consent solely for realisation of organisational objectives,

⊙ Infringing any terms and conditions in any manner which were contractually committed to be observed while obtaining personal/entity specific data of any stakeholder,

⊙ Sharing sensitive but permitted data of stakeholders with third parties who do not have wherewithal and contractual obligations for protecting the data,

⊙ Contravening various data and digital technology related regulations in all the geographies where they operate, and

⊙ Agile enough to capture legal and regulatory changes in requirements for good governance and initiate immediate action to ensure compliance.

Cornerstones for Success of DT - Humanity First

Human civilisation, since onset of the first industrial revolution in 1770 with steam engines and mechanisation, have experienced ground-breaking technological inventions and innovations over centuries. All those have delivered thousands of products and rendered invaluable services to humanity. Many of those have withered away, lost utilities and/or replaced by new inventions. Digital technologies, in addition to continuing with the same tradition, are helping to solve hitherto perplexing and complex problems. Immutable, cognitive, robotic and immersible technologies, powered by internet and aided by IoTs, are also helping to predict future with near actual accuracies and performing functions with accuracy, transparency at an overwhelming speed.

Wellbeing — The right to independent thought and growth

Inclusion — The right to belong and to access

Security — The right to safety and protection

Privacy — The right to information ownership

Accountability — The right to fair representation, to know and appeal

Trust — The right to know and depend

Source: https://blog.prototypr.io/ethical-principles-for-humane-technology-19f4fb3b0ba2

Any technology, irrespective of being in physical or digital domain can stand the test of time if it fulfils six criteria as detailed in the above graphics. Attributes may differ due to nature of utilities offered by each. Any innovation must ensure maximisation of value creation and minimisation of value destruction. Additionally, the ultimate humane objective of any technology should be all-encompassing growth with inclusive happiness. It must ensure equitable distribution of facilities and values that are created amongst all human beings across all societal strata. That any technology must be developed and applied on the principle of only one version of truth need no special mention.

In his second article[6] on digital solution designing the author reinforced the above views with the axiom - *"The main thing is to keep the 'Main Thing' as the main thing."* It is up to the designer to decide what is the 'Main Thing' when she/he designs a solution for an identified problem of affected stakeholders. The more axiomatic point is that the legacies which have brought humanity up to Industry 3.5, will not help to reach the pinnacle of success for Industry 4.0."* Human civilisation has not come this far to reach the present milestone only. It must move ahead with more success. Two questions that are vexing minds of many are:

⊙ Why so much of disparities and gaps exist between 'Haves and Have-nots' despite basking in glories of so many industrial revolutions, inventions, and innovations?

⊙ Why could we not establish a society with equity for inclusive growth and inclusive happiness will continue to haunt mankind?

Objective of this article is not to dig out reasons for the present state of affairs. It is better to move ahead with ideas on initiatives and concrete action steps that can bridge that gap.

Ethics and Humanity - Solution Builders' and Implementers' Perspectives

In many of his keynote speeches in summits and conferences at both national and international levels the author has enunciated his own thoughts and 8WH Principles for digital solution designing.[7] Those can also be validated using words of wisdom from Indian mythology. One such pearl of wisdom is *"We are born into the world of nature. Our second birth is into the world of spirit. But he who with strong body serving mind gives up his power to worthy work."* Albert Einstein cautioned saying, "*The true sign of intelligence is not knowledge, but imagination.*" 'Gurudeb Rabindranath Tagore wrote, *"I slept and dreamt that life was joy. I awoke and saw that life was service. I acted and beheld that service was joy."*

The underlying common thought of these three quotes is that power of mind and spirit, and the sole objective of service to humanity will be the key determinants of success worth the word. Else the world will continue to watch mankind more sharply divided into two groups, viz., people with abundance of wealth and people with profusion of misery. There will be a middle class who will continue to help creating wealth for the former group.

The above thoughts can further be elucidated from the perspective of solution designers through the following points drawn from one of his papers on blockchain technology[8]:

⊙ Technology does not have morality, emotion, ethics, and value generation skill of its own. Technologists have. Success of DT will depend on those humane qualities of solution builders. They must ensure that least possible scope is left for anyone, including internal stakeholders, to exploit their 'innoventive' creations with ulterior motives.

⊙ Frontend users must have options for self-initiated executable contracts with parties anywhere in the world, which are drafted on the foundation of equity instead of being dictated for what is to be done.

⊙ All solutions and their applications must be grounded on the humane foundation of universal altruism and sustainable shared values.

⊙ Humanity is one and the world is its home. Hence there is the need of a global regulatory body for crafting policies and directional guidance, and monitoring applications of digital technologies and outcomes. The regulators' oversight functions should also be driven by insights for ensuring services to humanity.

⊙ Leadership team of every organisation adopting DT must reorient their operations, related cultural attributes and management audit functions to meet demands of the new era. This has been set out by the author in his article on 'Audit 4.0.'[9]

PwC, Netherlands[10] in one of their publications echoed the above thoughts when it states that, *"To the organisation of future, digital ethics is not just another buzzword, but at the heart of its success. It is currently difficult for organisations to implement digital ethics, mainly due to a lack of recognised ethical regulations to strengthen society's trust in the digital*

economy and a lack of staff with the necessary skills to do so.".

Behavioural scientists Nicholas Epley and David Tannenbaum in their seminal paper titled "Treating Ethics as a Design Problem"[11] (2017), dealt with three 'myths' about morality, which according to them are consistent with three themes, viz.:

- ⊙ *"Ethics are a property of people, rather than the broader context in which the behaviour takes place,*
- ⊙ *People's [good or bad] ethical intentions lead to [good or bad] ethical actions, and*
- ⊙ *Ethical reasoning drives ethical behaviour."*

They have recommended for in-built ethical safeguards even when any activity is being performed with good intentions and objectives. They cautioned leaders not to be tempted and misjudge the efficacy of ethics which employees received as inputs from family, society, academic and professional courses/ training. They must not undervalue the paramount importance of contextual modifications that are to be done and monitored for ensuring ethical behaviour. *"To be effective, policies must treat ethics as a design problem; that is, policymakers should create contexts that promote ethical actions. ... policies and decision environments are more likely to be effective if they are designed to go with the grain of human psychology."*

Humane and Ethical Dimensions of AI and RPA

In the light of the above discourse and for bringing in some degree of real-life contexts to this article it would be useful to briefly deal with two of the most talked about digital technologies, viz., Artificial Intelligence (AI) and AI driven Robotic Process Automation (RPA). These two are often becoming subject matters of controversies and debate with direct correlation to ethics and humanity. Readers may be aware about the event of a robotic killer as reported by the UNO[12] – *"Are killer robots the next threat faced by humanity? A United Nations report claims that a killer drone trailed and attacked a human being without directives to do the same."* This has happened despite UNO appealing in 2018 for banning of killer robots. At the outset it would be useful to recapitulate the following three stages of AI:

- ⊙ **Artificial Narrow Intelligence (ANI):** Capability in specific context, e. g., weather forecasting.
- ⊙ **Artificial General Intelligence (AGI):** Human level of cognitive functions across wide variety of domains, i. e., equal cognitive capabilities of a human being to recognise sound, image, etc.
- ⊙ **Artificial Super Intelligence (ASI):** Entering the stage of science fiction surpassing all hitherto seen human intelligence.

It is accepted that AI at its present state of development is helping commercial world and governmental agencies in many ways. But in the light of the above event of a robotic killer three questions deserve to be pondered over:

- ⊙ Will AI be able to a substitute and/or should be allowed to substitute the wisdom of senior people and those we inherit from Indian mythology by mimicking the way their brain works/used to worked for also dealing with issues involving applications of emotional intelligence?
- ⊙ Will that stage ever come when AI, which is continuing to proliferate with powerful mutations, will overtake human intelligence?
- ⊙ Will digital scientists be able to give assurance that AI driven tools and RPAs will never make mistakes that may prove to be catastrophic for human beings?

These questions become more quaking when one notes the comment of Yan LeCunn, Director (Research) of Facebook. He is of the view that, *"Despite these astonishing advances, we are a long way from machines that are as intelligent as humans - or even rats. So far we have seen only 5% of what AI can do."* It would be a mindboggling task to predict what would happen to humanity even if half of the balance 95% of AI's capacity is achieved! Therefore, time is here and now to analyse the following illustrative, but in no way comprehensive, questions emanating from applications of AI and RPA as the author have brought in a few of his earlier papers and presentations:

1. Directionless - What happens if there is no directional guidance and regulation for designing solutions? The worst case in point is the aforesaid killer robot?

2. Legal Authority and Mitigation of Loss - What happens if users suffer losses due to advice from humanoids which are artificially made intelligent? Retail banks have started using such humanoids for reducing human interventions.

3. Unemployment - Will AI be able to generate new jobs with more thinking content and creative abilities? This is essential because RPA will reduce human deployment in certain operations. For this the quality of technical education and training must substantially be elevated, and conducive environment has to be offered for people to think and 'innovent'.

4. Collaboration - What happens if RPA and robots fail to collaborate with human beings when applied in areas like manufacturing, assembly shops, robotic surgery and so on. The evil effects and losses from such failures may be far reaching, voluminous and irreparable?

5. Transition - How to ensure transition from human driven processes to AI and RPA driven processes with painless change management and without negative impacts on human psychology?

6. Inequality - How equitable distribution of the wealth, created by AI and RPA, is to be ensured in the absence of directional guidance and code of standards from multilateral agencies?

7. Humanity - How to ensure that human beings not become slaves of networked AI, IoTs and RPAs, particularly keeping in view accelerated pace of using artificially intelligent IoTs?

8. Bias Robots - How to ensure that all bias have been eliminated from artificially intelligent robots and RPAs so that disastrous results are avoided?

9. Security - How to ensure that power of AI is kept safely away from and/or ahead of cybercriminals who are also using AI based tools for spawning

malwares and ransomwares for minting money?

10. **Evil Genies -** How AI and RPA driven process can safely be designed to prevent unintended consequences being inflicted on the targeted beneficiaries in the absence of policies and guidelines at global level?

11. **Singularity -** How to ensure that humanity is not commanded and does not remain in control of a complex mesh of intelligent systems?

12. **Rights of Robots -** How rights of robots are to be defined with humane treatment, to the extent desirable and recognised under rule of laws? Conversely will RPA driven process be able to conserve human rights as enshrined in the UDHR of the UNO?

13. **Artificial stupidity -** There is no reason to believe that AI and RPA driven processes will not result in stupidity, proof of which are there aplenty. How it is to be ensured that newer varieties of such stupidity do not cause irreparable damages to users?

Digital solution designers, particularly with applications of AI and RPA would do well if they keep in mind the following findings in 2019 from a research jointly conducted by Oxford Insights and International Development Research Centre[13]:

⊙ Artificial intelligence technologies will add ~ US$15 trillion to the global economy by 2030.

⊙ Countries in the Global North are better placed to take advantage of these gains than those in the Global South. The risk is that countries in the Global South could be left behind by the so-called fourth industrial revolution.

⊙ The danger is unequal implementation will widen global financial inequalities.

Keeping in view the above one can conclude and demand that there is an immediate need for multilateral agencies at global level and governments at sovereign nation's level consider the matter in right earnest and pronounce agreed international code of standards for applications of digital technologies

duly modified to befit the country specific requirements. It is encouraging to note that guidelines issued by the High-Level Expert Group on Artificial Intelligence (AI HLEG) set up by the European Commission in June 2018[14] recognised that, "*Trustworthy AI has three components:*

1. *it should be lawful, complying with all applicable laws and regulations;*

2. *it should be ethical, ensuring adherence to ethical principles and values; and*

3. *it should be robust, both from a technical and social perspective, given that even with good intentions, AI systems can cause unintentional harm.*

The Guidelines are clear that these components should be met throughout the system's entire life cycle and provide guidance largely in relation to the second and third components: fostering and securing ethical and robust AI."

Conclusion

The author would like to take liberty to conclude by reiterating with all humility the ten commandments for digital transformation as articulated by him. He requests all digital scientists, solution designers, implementors and leadership team members to follow these commandments:

⊙ Humanity first

⊙ Reduce complexities

⊙ Reimagine consumption

⊙ Go for creative destruction

⊙ Manage climate emergency

⊙ Redistribute power and wealth

⊙ Be accountable without discrimination

⊙ Fix imbalance of humanity and technology

⊙ Enhance technology with universal altruism

⊙ Let imagination and ethics lead transformation

The author is of strong conviction that his above directional thoughts, articulated as commandments, will certainly help achieving all objectives of digital transformation in compliance with all imperatives for services to humanity and ethical acts. All these in turn will also help safeguarding human rights with due

respect and modesty. **MA**

Note

This paper is based on the keynote speech of the author delivered on the FinCon Day of The Economic Times DataCon Virtual Summit held on June 16, 2021.

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