

Technological Innovation for Global Disruption!!

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“Your scientists were so preoccupied with whether they could, they didn’t stop to think if they should” – famous dialogue from the movie ‘Jurassic Park’

Abstract:

The fourth wave of industrial revolution has caused more harm than good to mankind. ‘Disruption’ has become the Mantra of the business world. Even five decades back, the spirit of business was literally ‘value addition’ but the blitzkrieg of technological up-gradation or innovation has changed the perception swiftly and the nexus of mammoth capital, skewed political leaders and advanced technology is continuously resulting into jaw-dropping disruptions thereby leading the mankind to a horrible state of helplessness, serfdom and mass-paranoia at large. The vicious cycle of tech-based activities is more dangerous for the poor and developing backward countries following their drastic lack of physical and intellectual resources on the one hand and their reluctance to be innovative as per their limited socio-economic needs on the other hand. Those countries are caught between the devil and the deep sea that is endangering their centuries old social and cultural needs and creating all kinds of confusions, distrust, inequalities, xenophobia and bigotry. New international Techno-economic order is compelling them to imitate and accept all those business orders where the majority of producers going for the labor replacing convenient technology and creating a large base of frustrated consumers who are left with ever-receding real disposable income consequent upon continuously shrinking employment opportunities. The characteristics of gig economy are overpowering the financially backward countries that are swiftly changing their established social perceptions and orders like mutual respect, tolerance, and empathy. Almost all the people have learnt to adjust and finding the ways of convenient living somehow or the other. The biggest harm caused by the hi-tech gadgets has changed the peoples’ sexual behavior resulting to crumbling plinth of time-tried and high-valued social institution like ‘marriage.’ In the madding race of most misunderstood nomenclature ‘Growth’; the world has forgotten the central question ‘What the mankind actually needs?’ And once the basic question goes beyond the sight; life’s equation shatters and takes to rapid and painful end.

Key words: Disruption, value addition, blitzkrieg, xenophobia, bigotry

Creative Destruction and Life:

The Austrian economist Joseph Schumpeter had consciously coined the concept of ‘creative destruction’ in 1942. He had emphasized it describing as the "process of industrial mutation that incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one."^{*1}

The theory basically assumes that traditional arrangements and assumptions of production system should be destroyed for freeing up the resources and energy to be channelized for innovation. Schumpeter essentially viewed economic development as the natural consequences of the market forces for creating spiraling **profit**. He was biased with the advantages of capitalistic growth and profit making mechanism and hence, carefully avoided to think over the disastrous impact of such proposition on the existence of life and living on the planet Earth.

In the year 2009, ecology scientist Yohan Rockstrom and his fellow researchers had written a paper titled ‘A safe operating space for humanity’ in Nature.^{*2} They had indicated that the environment system from which the mankind procures and utilizes the elements for its survival, each one of it has its external or the ‘planetary limit.’ Going beyond that limit would endanger our existence. The Rckstrom team categorized nine elements such as – (i) climatic change (ii) depletion in Ozone layer (iii) vapor and dust particle content in air (iv) acidic content in sea/oceanic water (v) reckless use of water resorce (vi) chemical pollution (vii) illogical use of land resource (viii) depletion of bio-diversity and (ix) disturbed Nitrogen & Phosphorus cycle. They established that on three counts – bio-diversity, climatic change and Nitrogen cycle; the planetary limit is already crossed over. On the other hand, increasing level of acid content in the oceans is also reaching a precarious level.

The ‘Intergovernmental Panel on Climatic Change’ (IPCC) has warned through its various reports that during 1750-2019, the carbon dioxide has increased from 180 or 10 PPM to 410 PPM level. Such disastrous level of carbon dioxide was never there in the past eight lakh years. It has clearly pointed out that the global temperature has already increased by one degree (recorded in 2017) and world is required to reduce it by 49% by 2030 to avoid 3 to 4 degree increase by 2060. Even a 0.5 degree temperature increase would cause higher frequencies of Aayela, Bulbul, Katrina, Amphan, Yaas etc. thereby destroying the marine-life and lives and livelihoods of the people residing in the long coastal

areas. The IPCC report shows that the warming of water and air has disturbed the rain-cycle causing unpredicted flood and draught around the globe. Obviously, the 17 count pledges for targeted program for alleviating global poverty and hunger by 2030, seems to be a distant dream as from now.

David Vs Goliath age:

Reckless usage of fossil fuel for industrialization and power generation, unplanned and aggressive urbanization, limitless application of chemical fertilizers in agriculture, depletion of forest cover, dumping of industrial and deadly chemical waste anywhere is ensuring enormous and long term harm to the current and future young generation. Mindful use of ultra-modern technology can mitigate most of the crisis effectively however, the 'Profit-centric' invention and innovation system is continuously replacing 'Welfare-centric' socio-economic order reminding the Gresham's Law that holds 'bad money ousts the good money.' When Nancy Pelosi, the speaker of the United States House of Representatives since 2019, openly admits, after the US withdrew its support from the Paris Accord that any climatic disaster would bring business for her country; the intention of the technologically advanced countries for exclusively reserving use for hi-fi technology for their vested interest pushing the disadvantaged countries in further crisis. After so much hullabaloo about application of AR, VR, IOT, and other machine-learning in increasing productivity and efficiency in the agricultural sector, 'at least 52% of arable land has gone unproductive and on date, 820 million global population is facing semi-starvation and starvation whereas food-grains amounting to \$1 billion are wasted annually because the affluent section of the global society can afford to be so. The size of population, pro-consumption production pattern, size of import-export and volume of waste that determine the global 'ecological footprint' shows that the developed countries have already surpassed the safe limit of 1.7 of GH (global hectares) whereas India is about to exceed it shortly with its present 1.6 GH. Overall the world population is surviving somehow oblivious to the fact that collectively the 2.8 GH limit is already exceeded.*3

The innovators, enjoying sadistic pleasure in competing with their smart counterparts, are finding newer ways to achieve higher levels of growth conveniently shutting their eyes and ears to the warnings of WWF that between the years 2007-2016, the living planet has lost 68% varieties of birds, fish, reptiles and amphibians and 83% of creatures living in marshy lands. Will they ever think that this planet is for every species or only a habitat for the affluent, privileged, tech-savvy double-speak people who talks about global welfare on the one hand and walks stoically for 'technological apartheid.' By using their diligently earned tech-knowledge they can easily make this planet Earth more and more beautiful place to live in; rather they are searching for other nearby planets where a privileged class can establish their hi-fi colonies where no law of land might restrict their sweet-will experiments and overwhelming enjoyment of life. This shows the banality of awful technological revolution. How many more Chernobyl (1986) and Fukushima Daiichi nuclear plant disaster (2011) world should afford in the name of technological advancement? Japan is going to release one billion liters of highly toxic water stored since the disaster in the ocean shortly causing grave concerns for all the state heads and environmentalists.



Fukushima Daiichi Nuclear Plant disaster: 11th March, 2011. Photo Reuters

The last decade:

When Jonathan Porritt, in his book 'HOPE IN HELL: How we confront the climate crisis & save the Earth', reveals that the top 20 companies dealing in fossil fuels are responsible for 35% of carbon dioxide emissions in the world and that 10% of the richest people in the world today are responsible for at least 50% of consumption-related greenhouse gas emissions, with the poorest 50% accounting for just 10 per cent. He warns against any naïve techno-fixes and solutions that side-steps the root cause

of the problem – the global patterns of consumption. Being inspired by the great world leaders like Mahatma Gandhi and Nelson Mandela, he suggests for resorting to mass civil disobedience for effective political disruption questioning the cost of growth, exploitation and environmental destruction compelling the policymakers for ‘de-growth.’ However, Porritt after eliciting despair, grief, rage, shock, disbelief, and fear gives clear message-“ What we all know now, irrefutably, is that this is literally the last decade in which authentic, grounded hope will be available to anchor everything we can do to serve our families, friends and future generations.”*4

India – doublespeak galore:

Prime Minister Narendra Modi’s favorite slogan is –“Sabka saath, Sabka Vikas, Sabka Viswas” that literally denotes ‘consented and all inclusive development for all.’ On 13th June 2021, delivering the lead address in the 47th G7 meet at Cornwall, United Kingdom, he said that democracy and freedom were a part of India’s civilizational ethos while sharing concerns that open societies were particularly vulnerable to disinformation and cyber attacks and underlining the need to ensure cyberspace remains an avenue for advancing democratic values and not subverting it. However, through his lecture he admitted directly that the innovative techniques like information technology and analytics, business Informatics, data mining, block chain technology, machine learning, e-Governance, e-Business, Mobile Commerce, etc. has endangered the security, sovereignty and democracy of the country more than before.

Scanning the ground level reality within the country, it is observed that the ultra-right ruling party has systematically stifled the voice of the people, defunct the democratic institutions, slapped sedition charge on a large number of intellectuals and jailed them for many years now, openly playing divisive politics damaging the resilient texture of the society, abused the IT cell to curb the democratic rights of the mass and crippling the media at large, downgrading the intellectual class every now and then, formatting the socio-emotional quotient by emanating confusing and fake messages through social media platform, developed a culture of ‘lynching’ for those having different religious faith for which the journals of the developed countries have openly criticized the P.M. and the High Courts and the Supreme Court off and on pass strictures and compelling orders to shun his continuous non-functioning declarations that is continuously harming the unity and integrity of the country. His most efficient IT cell has been able to restructure the mind en-mass and the Indian society stands clearly bi-parted on date. Apparently, the number of people existing ‘below poverty line’ has gone up from 32 crores in 2014 to 80 crores in 2020 even after much trumpeted tech-based activities in India. During the harshest lockdown for 89 days in 2020, while around 13.3 crore people lost their jobs and livelihoods, 10 big industrial houses added around Rs.14 lakh crores to their assets in the same period. The Adani Mining chief executive Lucas Dow said the Galilee Basin coal mine in Australia will produce up to 15 million tons of thermal coal per year, and importing around 27 million tons in the country that would add up approximately 30 billion tons of carbon dioxide in the environment. The ‘Stop Adani’ movement is intensifying in Australia whereas Modi is allowing his imports unchecked in the backdrop of his promise to fulfill the Paris Accord standards by 2025!!

While summing up, it will be pertinent to mention the findings of an anonymous research leader for a U.S. federal agency who wrote, “At this point in time, I don’t know how we will reduce the spread of misinformation (unknowing/individual-level) and disinformation (nefarious/group-level), but I hope that we can.”

“Dream on, if you think that you can equate positive change with everybody yelling and those with the most clout (i.e., power and money) using their power to see their agendas succeed. Minority views will always be that, a minority. At present and in the near future the elites manipulate and control.”*5

References:

1. The theory of creative destruction by Joseph Alois Schumpeter in his book **Capitalism, Socialism, and Democracy**, 1942
2. Published in ‘**Nature**’, volume 461, pages472–475 on 23rd September, 2009, by Johan Rockström, Will Steffen, Jonathan A. Foley
3. Kalyan Rudra, President, West Bengal Pollution Control Board in his article ‘Ghorey Deke Aana Mrityu’ published in Anandabajar Patrika dated 5th June, 2021, p.4
4. Sir Jonathon Espie Porritt, is a British environmentalist and writer in his book ‘Hope in Hell: How we confront the climate crisis & save the Earth’ published in June, 2020
5. [HTTPS://WWW.PEWRESEARCH.ORG/INTERNET/2020/06/30/TECH-CAUSES-MORE-PROBLEMS-THAN-IT-SOLVES/](https://www.pewresearch.org/internet/2020/06/30/tech-causes-more-problems-than-it-solves/) PEW RESEARCH CENTER, 30TH JUNE, 2020