A Canvas for Tomorrow's Intellectual Global Village

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The Wonderland

Ursula K. Le Guin, a celebrated American novelist who claims to have been greatly influenced with Lewis Carroll's Alice in Wonderland, quotes in *The Left of Darkness*, 'The only thing that makes life possible is permanent, intolerable uncertainty: not knowing what comes next'.

The knowledge-sailors of today seem to have been engrossed in a voyage, kind of like Herman Milville's Ishmael, to propel innovations and create a technologically precocious tomorrow. This approach, though plausible, seems to have been verging on the like of *transhumanists*, whose conceptualizations appear, to say the least, incoherent and intangible. The perception of the emergence of transhumans is analogous to that of an uncontrollable fission reaction in that the control of highly cognitive and evolved humans with abilities far exceeding the congenital and physical barriers of today would be impossible, and the repercussions unfathomable.

The non-linear propulsion and forceful catalysis involved in forging the *knowledge workers* of tomorrow might offer a temporary solution for the near future, but certainly not in the best interests of the society as a whole. This unchecked and non-natural occurrence of accelerated changes might converge into I. J. Good's conceptualization of *Technological singularity*.

Technological singularity would lead to an *intelligence explosion*, wherein, in the words of Alan Turing's colleague, I.J. Good – 'An ultraintelligent machine, one that far surpasses all the intellectual activities of any man, however clever, could design even better machines; there would then unquestionably be an intelligence explosion and the intelligence of man would be left far behind. Thus the first ultraintelligent machine is the last invention that man need ever make'. Consequently, it can be deduced rationally that the idea is not to create the destruction of human intelligence, but to harness it in a way that would render a safe yet intellectually

advanced world, one where a synergetic equilibrium exists between man and machine.

Evidently, there stands a need to invest in the realm of technology for the future, not infest it in a way that would stand counterproductive to the very cause it was birthed for. Such an investment earns the best rewards when ideas are stemmed from the standpoint of the society, with *innovation* cradled at the bedrock. This innovation differs from the one hypothesized by the transhumanists in that the innovation here is brought about with prior knowledge of the needs of the society at large.

Innovation is not just about creating peerless supply, but also about spawning a singular demand. In Steve Jobs' words, 'Innovation distinguishes between a leader and a follower', which rings a tune similar to that of Peter Drucker's abstraction of a knowledge worker and a regular worker.

Innovators, who are essentially knowledge workers and more often than not entrepreneurs, are by and large instrumental in both creating and catering to the demands of the people. Thusly, the underlying task for all innovation-oriented establishments should be to nurture the development and synchronicity of engaging and endearing the workforce to patronize with the public in order to create and cater the inevasible necessities. This hypothesis proves the societal standpoint right and also establishes, from the perspective of a sustainable economic outlook, the need for *knowledge societies* over information societies.

Taking into consideration the *societal sphere*, the demands for tomorrow are created today by taking into account the happenings and experiences of yesterday. Implying, the society doesn't always need one to be an inventor, but an innovator. It needs workers, who can tinker with the existing raw materials and apply their *knowledge* and unique perspectives and collaborate, if need be, to forge things that would, unequivocally, benefit the society. As George Orwell rightly points out in *1984*, "He who controls the past, controls the future. He who controls the present, controls the past".

In *The Coming of the New Organization*, Peter F. Drucker points out that, 'Information is data endowed with relevance and purpose'. Hence, this information, which is of pinnacle importance for innovation, needs to reap relevant and pertinent data from the precincts involving the pivotal spheres that define and complete the widely accepted definition of a *society*, viz., politics, economics and culture of the modern society, in resonance with the tools needed to craft the supply in demand.

John Whitefield Kendrick, a pioneer in productivity measurement and economic accounting, points out that, "The primary driving force of economic growth is the growth of productivity", and Gordon Earle Moore, Co-founder and Chairman Emeritus of Intel Corporation, postulates that, "Productivity growth is the key economic indicator of innovation". These two statements combined, we can relate by means of transitive property that innovation is directly linked to *economic growth*.

Hence, economic growth through innovation, innovation through knowledge and knowledge through information clearly paints a clear picture of the fact that information solely constitutes economic growth, which perfectly relates to Peter F. Drucker's prediction for the future, 'The major changes in society would be brought about by information'.

Evidently, information is the most valuable commodity of the present day world, which when morphed into knowledge, can be traded for economic gains. Thus, knowledge and information are indispensible and inseparable. A knowledgeable person is like a sieve, crafted with the ability to filter out the *unnecessary* information and extract that which is needed.

According to the law of large numbers, the average of the results obtained from a large number of trials will be close to the expected value, and will tend to become closer as more trials are performed. Meaning, as large numbers of observations are considered for various iterations, the accuracy and the preciseness of that which is sought is high. Hence, a knowledge worker needs to be fed with continuous and uninterrupted information, which is precisely why global information societies have spurred into existence.

The idea of a global Information Society can be viewed in relation to Marshall McLuhan's picturization of a *global village*. However, knowledge is the crucible forging the wisdom needed for innovation and since information is the mold being poured into the crucible, the creation of global knowledge societies are of prime importance. For this to happen there is a need for continuous supply of information and this can only be achieved through collaboration of information societies from around the world.

Internet, as the name suggests, is the melting pot of innumerable wealth of subjects from all corners of the earth we know of, and beyond. It is a majestic platform for the collaborative influx of information, which is the East India Company of the digital empire. This influx, in time, due to the ever-increasing growth in the market conditions for the "commodity of the new world", will attract information from every sphere of the society, making data gathering a universally inclusive task.

The setting of constraints in the form of rules hinders participation and the Internet, commendably, hasn't enforced stringent measures to prohibit people from expressing their opinions and perspectives. Now, with such enormous data floating about and people from a wide spectrum looking to cash in on the open source, clusters of data pile up from all fours, unavoidably bulging up the balloon of unchecked information. A consensus on this work being labeled "constructive" inevitably fosters the growth of the destructive community. However, upon cautious analysis, one can deduce that what is constructive for one might be destructive for the other. As Abraham Lincoln once said, 'We can complain because rose bushes have thorns, or rejoice because thorn bushes have roses'. So, in reality, the dark web or the deep web are of virtual existence, they are parasites hosting on the ripeness of human perspectives.

The increase in the rate of *constructiveness* is directly proportional to the increase in the rate of *constructive-destructiveness*. It is the law of nature, as we know it, and the problem, should one consider it so, can only be neutralized by achieving technological singularity, which beats the purpose of our investigation. Moreover, the constructive-destructiveness leads to constructiveness to contravene the effects of constructive-destructiveness and the cycles grow in an infinite loop, creating a situation similar to that of "Which came first, the chicken or the egg?"

In summary, the future of our digital age is headed towards achieving the gradual evolution of both man and machine, with knowledge workers percolating the requisite information based on the needs of the society and symbiotically creating and catering the demand-supply cycle with the intention of achieving economic, cultural and political stability.

Now, the real question is: Who gets to play the percolator?

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The Pursuit

The mission of a knowledge worker shouldn't and cannot be one that of Alice's wherein the destination is "somewhere". The destination, I fear, should be exactly the place where one wants to be and precisely at the time he/she wants to be there.

In pursuit of the proverbial goal, we often tend to look for what we want to be seen, like one that of this essay. The quotations and laws and analogies mentioned here are paraphrased, extrapolated, optimized and suited to make sense in my pursuit of achieving "the goal". Now, there is every chance for these facts to be taken out of context, wooed irrelevant and deemed unprofessional, but all of those opinion are again based on individual perspectives. So, for knowledge workers, it isn't enough to be just good percolators, they should also know and understand their *target audience*.

The percolator should be one that filters the required information that is pertinent to a sector of the society, the decision of which would in turn impact the collective opinion of the society. For example, reaching the children by creating an impact about a product or an offer attached to a product would in turn compel the parents to adapt to that product. Thus the idea of reaching the target audience is a key ingredient to obtain the perfect blend for tomorrow's dawn.

The expectation of the target audience is ever dynamic and so are the parameters determining the characteristics of the percolator. Thus comes into picture the need for education.

Through time and age, the world has evolved by the aid of education. Education has made the world a place worthy of life and education is what is going to take us forward. 'An investment in education pays the best interest', but education makes sense only when it is universal and accessible to all.

Not many are aware of the developments around them. Some people feast on the information reaped from the Internet and grow increasingly reliable upon it for the "unquestionable knowledge". As mentioned by Gross in the paper *Ignorance and Surprise: Science, Society, and Ecological Design,* 'The very advancement of the knowledge paves way for the advancement of increased ignorance or nonknowledge'. This implies the need for one to be cautious and aware of the world that envelops him/her. Thus comes into light the necessity of education in giving the thrust required to establish a rapport between the target audience and a knowledge worker. In addition, this education makes sense only if there is freedom of expression. What is being taught, if it is being taught, should be apt and should be the naked reality. Withholding information and teaching or reading only that which is purportedly important only from the purview of achieving literacy contributes to the making of the least worthy of knowledge workers.

Hence, the concept of education should not be restricted to schools alone. At all times, education should be accessible to everyone and everywhere. An ingenious platform that paves way for the influx of collaborative information from various precincts and makes such information available on the public domain almost instantly at the TOA of the information stream should serve us with the perfect tool for chiseling out our knowledge worker. The Information and Communications Technology (ICT) would serve one such platform that allows learners to seek information and develop knowledge at any time and any place, where access is always available and unrestricted.

The UNESCO World Report rightly points out that, 'The skill of learning to learn is one of the most important tools to help people acquire formal and informal education. In a knowledge society supported by ICT, the ability to locate, classify and sort information is essential. Equipped with this skill, the use of ICT becomes an active versus a passive endeavor and integral to literacy and lifelong learning'.

Education ensures continuous innovation that demands lifelong learning, knowledge development and knowledge sharing. A global knowledge society must thus patronize education and provide an ambient environment for knowledge workers to work in, and for regular workers to become knowledge workers. It can thus be empirically said that education creates the know-how for a knowledge worker to know the target audience.

Now, coming back to the original question, "Who gets to play the percolator?"

The answer is simply one that a knowledgeable person can conjure, with ease, from what has been discussed so far. A percolator is the ever-dynamic mind of a knowledge worker.

A percolator is the invincible mind of man that is channelized by education and modified periodically so as to visualize the future from the standpoint of the target audience, which would gradually evolve to encompass the "global village" by striking pinnacle collaborations and seamless information sharing. A percolator is thus the Vespucci of the digital wonderland.

The problem arises when there occurs a multiplicity of Vesspuccis. In a global knowledge society, as the perspectives of various knowledge workers come into play, there arises conflicts, which begs the need for democratization. And democratization, again, results in quashing the opinions in sight of a probable viable solution.

"The setting of constraints in the form of rules hinders participation and in turn, progress". In traipsing towards the future, we have a set rule of not wanting to attain "technological singularity", and the tradeoff for wanting human beings to be at the top of the food chain comes the price of imperfection, a characteristic that was deeply embedded into humans when evolution engineered the utterly convoluted gray matter.

The Revolution

In the paradigm of time we all are travelling in, *Industrial Revolution* is a term that rings a tune in resonance with long forgotten words like egrote or jehu. Industrial Revolution is a term now dear to the deeper gorges of history. In the recent past, *Information Revolution* has come into being and it has successfully given a new dimension to the industrial scenario.

Information revolution has tossed today's intellects into an innovative arena, making them increasingly cerebral, competitive and motivated. Competition between the innovators has fostered the need to triumph and has inspired people to work towards bringing about a revolution that ranks in par with the revolution sparked at the Great Britain of 1800.

A decade from now, the society would have evolved, through education and deft assimilation of synergetic information, into accepting and contributing a great deal to their domiciled world. The cerebral journey of today's society, in ten years, would have reached a destination that would compare with the current scenario in a way similar to today's smartphones with Graham Bell's telephone. Such a destination would have achieved a *Man-Machine Synchronicity* that would be facilitated by the coming of the *Internet of Things*.

The Internet of Things would push the managers and entrepreneurs to come up with organizations and business models that cater to the needs of the intellectual Adarsh Ramesh

global village wherein the physical world will be merged with the virtual web-based world. Not only would man and machine be in synchronization, but also the machines will themselves be intelligent by nesting themselves in conscious synchronization with other machines, giving rise to a whole new biosphere rife with spectacular innovations involving the perfect blend of the industrially manufactured things, webbased software and efficiently interconnected networks.

A decade from now, I would like to see myself as an evolved entrepreneur, capable of mobilizing intelligent resources by setting up universal educational facilities to keep the society enriched with due knowledge of the advancements in the realm of the *network of things*, thereby rendering a responsive audience to the products created by a web of like-minded global enterprises that trade the wealth of information in achieving high economic gains. Also, I would like to promote the availability of unobtrusive information on the public domain with unfettered access, thus brining down the detrimental forces in nature and achieving close-to technological singularity by patronizing with the utterly complex yet conscious machines that play an essential part of my conducive and productive biosphere.

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