Capitalism and Technology

Technology is all-permeating, touching every aspect of our society and our being. It is not an over-statement that modern human exists technologically. Taking a cue from Feenberg's paper[1], technology has been employed by both Capitalist and Socialist economies to do its bidding. However, with democracy and the concept of free-market coming on top in the majority of nation-states, it is its marriage with capitalism that has brought unexpected results. It is very interesting to see that the human attitude itself has changed by the use of capitalism-fueled technology. It has brought great perils to the environment, mechanized humans and overall taken complete control over our future planning as a collective and individual. I would like to shed light on some of these phenomena in this paper.

The relationship between a capitalist and a waged worker is nothing new. The origin of such can be traced back to the 17th century and cottage industries[2]. However, the intervention of technology in the market process has always brought about a change in the way the worker is seen. The shift from cottage industries to factory system resulted in the mass migration of people from the countryside to cities. This, in turn, resulted in new ways of living and a whole new dynamic between the affluent, rich consumerists and the down-trodden, cattle-class producers. All this was a direct result of mechanization of consumer goods fueled by capitalists profiteering from the new system. The money to set up the new system eroded the old ways and with it changed the whole trajectory of the world. Our world changed from an agrarian society to an industrial one. This, in turn, resulted in a change in the human relationship with nature. We started seeing nature more as a resource than the surrounding we always lived in. Cities and

concrete buildings became a more common and de-facto way of being. Looking back to the last 300 odd years it's not hard to see that technology played a key role in bringing this change and the process is not complete.

With the mass exploitation of natural resources, we have seen a swift increase in greenhouse gases leading to global warming. Swaths of forests have been cut down across the world to make way for new cities, industrial towns or pasture grounds for raising cattle. Newer and efficient mining methods have resulted in humans contracting deadly lung diseases and permanent ecological damage. The use of nuclear power has already several major incidents[3] resulting in loss of human lives and other long-term radiation-related illnesses. Even though we can argue about capitalist greed playing a major role in this circus, it is ultimately the use of technology that made all this possible in the first place. The unchecked, incessant march of technological progress often leaves devastating and unintended consequences in its wake. This could very well be attributed to the amoral nature of technology itself[4] or the immoral nature of capitalists using it.

What is interesting to see in the above argument is that this use of technology has largely made us indifferent to the problems of the environment and too self-absorbed in the utilization of technological gain. It is as if the amoral nature of technology has rubbed on us to make us insensitive and less ethical in the implementation of technology in the first place. Capitalist attitude, other than the growth and greed part, can very well be associated with this mentality. The development of the next better model of the food processing plant supersedes the other ethical/environmental concerns almost every time. In the absence of regulatory control, adoption of new technology made possible by corporate money and with little to no thought of possible demerits becomes commonplace. Bhopal gas tragedy is an excellent example of this[5].

Not only the environment but it's our personal lives as well which is deeply affected by the over-technologization of every aspect of our existence. The factory system is known to have made the workers themselves as an extension of the robots they use. They live a controlled life, waking to the alarm of the factory, going through the same work 9 to 5 and then coming home to prepare for the next day. Life in the corporate world is even more taxing from a mental standpoint where you are never away from work at any time of the day. Odd customer calls at 2 AM in the night are very common in I.T. and finance industry due to serving various geographical locations. Crunch phenomena in the gaming industry[6] and vampire squid banks of the developed economies[7] force workers to have 100 hour weeks. The thing to note here is that even after such horrible working conditions, there is an ever-increasing workforce ready to serve these industries. Some research also calls in the sanity of such employees who even though making $300000+ salaries yearly, hardly have time to spend it.

The number of yearly leaves taken by an average American has reduced from the 1980s with very few paid leaves available as per corporate policies[8]. With fewer leaves taken by employees, companies consistently keep dropping the number of paid leaves and this becomes a self-feeding loop. The constant demand for being at work, churning new code or 'disrupting' the industry, results in higher anxiety and depression levels[9]. So even though the need for making money to have a better lifestyle seems to fuel our actions, it's ultimately the entanglement in the technological way of being that prevents us from even living it humanely. In my own experience as of many of my peers, we have often wondered that why would the customer want a particular solution in a week's time, when he seems to be perfectly fine using the previous version we provided? The tight deadlines are a nightmare and we even see many of the updates not even

being utilized[10]. It's not surprising that such a push often comes from the higher-ups in the corporate ladder to meet their quota of 'innovation' and the opportunity to make more money by luring the customers to buy the 'latest' and get rid of the 'working'. In time with the adoption of the latest, comes new problems which again require hours of work and realignment. This never-ending loop with shorter and shorter deadlines is a way of life in many industries having a direct technological interface. The innovation happens often without a need[11].

Modern attitude towards innovation and technology can be very well summed up in the saying of Henry Ford, "If I asked customers what they wanted they'd have said faster horses". The same has been the guiding principle for the last 100 years and with technocrats like Steve Jobs becoming the embodiment of the ideal. Each iPhone is touted as a better version of the previous even though there is a lot of research questioning the truth behind the statement from a functional standpoint[12]? The long lines outside an Apple store on the launch day is testimony to the huge hype machine created by Apple around its product. There are online cults dedicated to defending Apple's vision and 'fan-boys' ready to rip any competition apart. People save the entire year to be able to get the next iPhone with no research into alternatives, a phenomenon that is rightly dubbed as "comparison neglect"[13]. This is a shocking behavior as far as the consumer goods market is concerned as people tend to usually spend more amount of time in buying a big-ticket item[14]. The success of Apple effectively shows that a piece of technology can create an almost parallel way of being than the otherwise regular going-on-your-own-business attitude amongst the masses when it has the right capital backing.

A personal anecdote that I can mention to drive the point home is my own adoption of the smartphone. Even till 2013, when the use of smartphones was fairly commonplace, I was still

using my candy bar Nokia digital mobile. A lot of my friends and office colleagues used to routinely make fun of the fact with many of them actively pursuing me to get a smartphone. This however never influenced me as I quite contended with my current arrangement. During one of the summer weeks, I lost my mobile and would have to wait a couple of weeks to buy a new one due to salary constraints. In this period, a friend of mine gave his spare smartphone for me to use. Within the period of those two weeks, I got so hooked to using Whats-App that I could simply not leave the device. Unsurprisingly at the end of the two weeks, I ended up buying a smartphone which cost me three times the price of the cellphone I wanted to buy in the first place. A few months after when I thought about the whole matter as it transpired, I was left wondering over my own behavior. Whats-App in its early days was nothing but a glorified messaging tool with some smileys and stickers but the impact it had on the way I communicate ended up me making a purchase that I never wanted in the first place. This technological application changed my whole way of thinking and scored a major win for its makers. I can only think of how many buyers like me would have got their first smart-phone due to just one random app they wanted to use.

Even activities like running and swimming have not remained untouched by the grasp of technology and the companies spearheading this change. Newer innovations in swimsuit technology brought into question a lot of fair play considerations in the 2008 Olympic games[15]. This later resulted in new rules and the adoption of enhanced swimsuits making huge capital gains for water-sport companies. It's a direct example of a corporate house influencing and ultimately changing the rules of the game to suit its agenda. Outdoor activities have increasingly seen the use of Go-Pro cameras and various fitness trackers to be updated on their progress. This, in turn, is supposed to make them a better athlete but the jury is divided on the topic[16].

People have been increasingly eager to try something new in the name of technology and progress changing their attitude towards the activity. More and more people now tend to buy the expensive workout assistant with the number of people exercising/engaging in physical activity plummeting[17]. With something as simple as running being done only when you have the latest fit-bit the vision of Borgmann is nothing but corrupted[18].

One of the major reasons that we hear and shown through extensive research for a reduced level of physical activity is 'lack of time'. One might wonder how come we have reached this state of affairs when one of the fundamental promises of technology is to provide more time for leisure activities. The answer again lies in the way capitalist and corporations use technology to get our attention. Platforms like Facebook, google, amazon and various other websites are designed in a way to keep us engaged. They know that the most useful thing that a common joe can give to them is his time. The more they engage you, higher are their chances to sell their partner/advertised products[19]. This is not even a secret and companies openly admit to using these tactics. This has fundamentally changed our interaction with fellow humans where we seldom try to lift our heads up from our mobile screens and inter-personal interactions are at the minimum. We are connected in virtual but dis-connected in the real world. Mihaly Csikszentmihalyi says in his book, *Flow*[20] – "The modern human psyche is a constant assault by information media giving very little room to develop alternate ways of thinking." The recipe for controlling the human mind remains the same from the advent of newspapers, radio, television to the internet, each the next iteration in the field of communication technology serving its masters. Earlier the masters use to be just the governments but now it can be any media house having enough money to propel its agenda.

On matters much more serious and having a direct influence on the matters of life and death, the military-industrial complex[21] is a troubling example. This unholy alliance is credited with fueling unrest and conditions of war in the most vulnerable of places in the world. The use of technology to make weapons and selling it to the highest bidder is going on for more than 100 years with no possible end in sight. This war-profiteering fueled by capitalist mentality has destroyed lives, displaced millions and has caused international refugee crisis on an unprecedented scale. The self-propagating weapon technology is always looking for better, more efficient methods of killing even though we have hundreds and thousands of models doing the same. It almost feels like an irrational, unstoppable urge to develop the next revolution in the already deadly ICBMs which can inflict more damage and increase the kill accuracy. This makes one wonder if its technology fueling the spending of money or the opposite?

With the above question highlighting a point made by many techno-pessimists, it is almost funny and troubling to see how the use of technology has essentially changed our way of thinking and interacting with the world. With research into artificial intelligence and the new space race initiated by the likes of SpaceX and Virgin Galactic, there is no denying the capitalist influence in furthering technological growth for profit[22]. Even though each and every corporate house involved in the field will state its vision to make human lives better, practical considerations make it more about the money than anything else. No matter which side of the table you sit, techno-pessimist or optimist, the role of capitalism in fueling technological progress is direct and deterministic. A redefining of the prevalent attitude about the world is required for preventing capitalism from becoming a tool in the hands of technology or vice-versa.

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