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Artificial Intelligence- Are we summoning the demon?!

“We are summoning the demon”, Tesla founder and tech entrepreneur Elon Musk said while speaking at M.I.T. in 2014. He intended to warn us against the extreme use and dependency of humans on artificial intelligence (AI).

However, PwC’s recently released report on the potential economic value of AI to different regions and industry sectors around the world claimed that AI is the biggest commercial opportunity for companies, industries and nations over the next few decades. PwC estimates that AI advances will increase global GDP by up to 14% between now and 2030, the equivalent of an additional \$15.7 trillion contribution to the world’s economy.

So, what basically artificial intelligence is all about?!

I was skeptical about the term too, until my PhD guide threw some light on the term and triggered my curiosity to the topic.

The PWC report defined AI as, “a collective term for computer systems that can sense their environment, think, learn, and take action in response to what they’re sensing and their objectives.” Most definitions of AI focus on replicating human characteristics like consciousness, self-awareness, language use, ability to learn, adapt so on. So when a robot can behave like a human we term it as artificial intelligence. For example computer programs that speak and converse with humans like amazon’s Alexa or Apple’s Siri. There are plenty examples in today’s world (self driving cars, Uber, Google’s Waymo being some of them).

I can elaborate on what AI is and how it is designed to help mankind, but I believe we are not here to understand the rocket science behind it. Lets face it, we are intelligent but lazy apes who are working on building robots to help us built more robots. We are doing this with the expectation that these robots will reduce our work pressure. But, the main point of concern is, ‘will AI actually help the economy or just

some capitalist and rich section of the society?’ Walmart announced that shoppers soon might see a lot more robots in its stores. Walmart’s new robots will be taking over repeatable, predictable and manual tasks that up to now have been carried out by human employees.

Walmart stores are in talks to install robots who will scan shelf inventory and track boxes as part of the retail chain’s inventory management. Walmart is not alone in deploying robots or artificial intelligence to handle these mundane tasks. Amazon has increased the use of AI in managing its many facilities. In the not-too-distant future, many employees are expected to be retrenched due to this highly fascinating intelligence. IBM, which has replaced about 30 percent of its HR staff with AI. Looking at this scenario, AI can be a devil threatening the developing labor intensive countries. In countries like India where population grows exponentially, introduction of severe AI technologies will only mean the unemployment rate to be even more adverse.

But we also need to look from the firm point of view. It is definitely true that the craze for AI is extreme and a firm which is not able to upgrade its working technologies with that of AI will stay behind the race of profits. But the main question is are these firms actually benefited with the labor retrenched AI technology? In capital intensive countries this might seem logical but in a labor intensive country where labor is actually cheap compared to these technologies; does this retrenchment actually make sense? What I am trying to point out is: firms act with profit maximizing motives only. They don’t take strategic decisions just to be ahead in the race of technology but to fulfill their profit motives. So, are the countries stated as ‘Developing’ but employing AI technologies aren’t developing anymore, rather should be categorized as developed? We have got a lot to think about.

Dear readers, I am not here to answer all of it at a go. The truth is, these are the questions which are seriously ruining my nights sleep. I hopefully, will be able to explain and answer these questions pretty soon. As of now I will try to provide you an insight into this topic.

Let us now consider a model economy. Let us look only into the tertiary (service) sector. The primary and secondary sectors aren't affected due to AI introduction (at least in my theoretical model) hence, we are ignoring the two sectors. To simplify things, let us just look at the transportation sector where AI has created a pretty good impact.

Now, you can question me why are we taking this example.... my answer to this, is very direct. Because, this was the first example my guide used to explain me what exactly is happening in the economy. Therefore, it was easier for me to frame a theoretical talk around this example.

Ola, Uber are AI driven taxi/cab services which are near substitute services of the normal taxi/cab services provided by the drivers on their own vehicles. They are definitely close substitutes but not absolute substitutes. The reason being that the consumers can actually book or cancel cab requests on their mobile apps and also the fare rates are regulated based on the demand and supply of cab services.

Normal cab services are provided using the driving skills and a cab (capital); which implies semi skilled labor and a capital. On the other hand, AI driven cab services are more complex to look at. Here, the services requires primarily semi skilled labor (drivers), capital (Cab/car) and more specifically skilled labors who will actually build the AI technology. So, to say the cost involved here, is higher. However, let us assume due to some reasons(there are plenty reasons why this can happen), AI driven cab services expand or receives a boom. This basically means that now people demand more of the Ola or Uber services rather than the normal cab services. So, will the normal cab drivers become unemployed? Well, in this case not really. The unemployment will actually be negligible. AI apps built are very user friendly. So basically, a driver does not need any additional training to switch to an AI driven cab driver. There might be some additional costs involved like getting a smart phone. But, most people can actually make an easy switch. So, to say, in this sector we do not see a labor retrenchment (at least not theoretically).

Now, stating this contradicting piece of example, I would also like to mention that it is actually not that simple to say if artificial intelligence is a boon or a bane. May be it

simply affects different section of the very same society differently. On one hand it is a labor saving technology, but on the other, it is also labor enhancing(save labor hours per individual). Thus, providing leisure hours to enhance individual skills through education or training. Artificial intelligence is curbing employments but is also reducing work pressure. A regress and a thorough study is required to state assured statements. But, I hope I could create some curiosity even in the minds of the readers.