BEYOND AUTOMATION: A COMPREHENSIVE OUTLOOK

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Introduction

Automation today, is a potential force to displace people from their jobs. Day in, and day out, there are multiple news stories, and articles, stating that automation will supposedly make half of the jobs vanish, in the long-term, when automation takes it full shape. One can agree to the fact that multiple repercussions of advanced automation can obliterate the current sphere of being hired. In short, when advanced automation kicks in, one can potentially observe all the related psychological and social ills of joblessness grow, be it economic recession, unemployed youth, or crisis on an individual level, in terms of identity. This does not only hamper the flow of regular work, but also disrupts the entire programming paving way for a new pathway.

Analysts, however, have supported a view that automation, to an extent is beneficial for the society. Known as augmentation, the process would be assigning machines the task which they can cater far more cheaply and rapidly than humans. Another facet of the exploration would be considering, what people may achieve when assisted by thinking machines. Eventually, the reverberations of automation can be minimalistic, if the event is considered as an opportunity for augmentation.

Evolving questions:

Q.1 Will automation consume jobs?

Q.2 How can automation be overcome with augmentation?

Q.3 What is augmentation?

Q.4 Why employers love augmentation?

Literature Review

Technological Advancement, as considered by many, is the need of the human generation. To go meet up the pace of the contemporary times, the aid of technology is unsurpassable. Currently, the human generation survives in a world, driven by uncertainties, and when the potential threat of extinction looms at our head, little does the generation have as a resort, to move forward, with. Automation, however, according to many, does not mean that jobs with routine or repetitive

tasks would cease to exist (Davenport and Kirby, 2015). Long ago, when ATMs were introduced back in 1970s, the masses were worried that it would replace bank branches and that employment would decline. Ironically, ATMs reduced the cost of operations and as a result, the banks had the cash to open up more branches. Eventually, employment opportunities rose, and as a result, there were more tellers employed in 2010 than in 1980, and their duties expanded to building relationships with customers, which obviously, was not the case with ATMs (Borland and Coelli, 2017).

The impact of automation on jobs can be effectively analyzed by considering the way workers relate with the technology at hand. It is important to differentiate between two terms, which are physical capital and technology, justifies Davenport and Kirby (2015). Physical capital is considered to be the sum of all the tools and equipments that are leveraged to produce other goods and services. Technology, on the other hand, may include the process and techniques that are being used to produce goods and services.

However, changes in technology will probably alter the way types of jobs are available, and what do those jobs imply. Moreover, as automation alters the current way people get hired, and for the jobs they are hired, economists suggest that polarization may be the end product (Scott, 2018). One can deduce that multiple “middle-scale” jobs would disappear through automation, but the number of jobs across high-skill, and requiring analytical thinking, would observe a surge.

If automation is indicted with being the sole reason for joblessness, it won’t be a wise decision. The surrounding hype around job loss due to automation is no longer limited to manual labor or relatively transaction-based, or customer-service executives. Rather, Companies are adopting “cognitive” technologies across multiple fields like finance, health care, and insurance, Multiple reports, and articles suggest that knowledge workers may be the next to be replaced, or “augmented”, when they work in collaboration with knowledge workers (Davenport and Kirby, 2016).

Augmentation is the need of the hour where the decline in cost of technology, coupled with the rising cost of labor, are rewriting the history of job-seekers, and paving a path for incremental

investment in automation. Moreover, automation is set to impact the business services sector, but is a long time to robots replacing the need for human labor. Nor does it confirm that automation would be the end of outsourcing tasks. Automation, according to many, will play a key role in augmenting the current workforce model. According to multiple reports, industries, and segments where automation has been widely implemented, there has not been a significant reduction in terms of headcount, remarks Thomas (2015). On the contrary, it has been considered the primary facet responsible to elevate the efficiency and productivity of workers and deliver cost and customer service benefits to clients in consideration.

Jobs, that were traditionally being automated, are the ones that are most likely to be consumed by automation. In fact, automation software is expected to become more cognitive and less robotic. However, the existing relation between automation and workforce is quite complex, in terms of hierarchy. While some jobs, which are currently performed by humans, are set to vanish, but if a broader picture is considered, the automated systems inevitably require some sort of human involvement. It may be in the form of configuring the system, overseeing the process, or delivering requisite maintenance. But it may eventually lead to creation of new jobs, where the ability to reinstate workers, would relieve them of repetitive tasks, and help them focus on the areas, where they could deliver more value, resulting in better employee retention rates, and eventually, a far more productive workforce, driven by automation.

Augmentation, according to multiple reports, is still in its initial years, where the best capabilities of both humans and computers can be combined, and leveraged to elevate productivity of any business. While automation is considered to be driving force, that will eventually consume jobs, augmentation can ensure that at least some humans, leveraging their “cognitive” capabilities, rather than being involved in physical labor-based tasks, are set to retain their jobs.

Augmentation, under a wide scale, may span across multiple facets, including, machine learning being leveraged to improve industrial processes, elevated workplace efficiency, and eventually, deliver seamless customer experiences. Augmentation is set to disrupt and probably empower the current workforce with added skills up their sleeve. It won’t happen in a day, or at once, across multiple job profiles, but it is set to happen, and leaders have to frame an automation strategy that reveals true benefits, minimizes costs, and rests on a deeper understanding of the workflow,

where automation is the driving force (Wisskirchen *et al.*, 2017).

Augmentation is the current focal point of leading players in the tech industry, where it enables enterprise businesses and large corporations to replace the current massive workforces, with fixed-cost servers that demand minimal human interaction, opines Darrell (2018). While these server farms are run by humans, who eat, rest, or sleep, the server farms themselves are self-sustained to work continuously, and produce minimal surprise variables.

These days are still early, even for the elementary idea of augmentation. Currently, Companies focus on automation as a step to eliminate human workforce, and reduce any resulting operational costs. Augmentation, on the other hand, is a job-saver for the current workforce, and would result in humans getting to retain their jobs, as observed by David (2015). However, in order for augmentation to implemented, one needs to prove that combination of humans with machines would be better than each working individually.

Augmented intelligence is probably a replacement to the current myths being propagated around Artificial Intelligence, which is considered to change the workplace, and the life of the masses, in general (Ben and Robert, 2013). Employers, today, on the other, hand, are excited by the multiple opportunities that augmentation offers. Considering the case of a well-built AI program, that can analyze patterns in multiple large data sets, and come upon a decision-they are still limited by the data being fed to them by human beings (Frey and Osborne, 2017). Hence, employers today, are looking out for opportunities that can help them reinforce the role human intelligence plays, while leveraging machine learning and deep learning algorithms to discover relationships and solve problems, which were initially, not executable by human workforce alone.

Employers today, are not sure of how automation can revolutionize their current business model, or humans, responsible for the jobs earlier, would be replaced. A logical deduction would be that new jobs would take place of the old ones, or that people would go back to school to learn new skills, that would keep them ahead in the race against automation.

Conclusion

The current world is driven by an automation mindset today, as businesses have took the path of exhaustive automation, to reduce workforce costs. However, if the current workforce has to be sustainable in the long-term, including the humans, in combination with computers, is the need of the hour, where the success of a business would be defined by constant innovation, rather than cost deduction. Humans, by virtue, are decision-makers, making a choice at every nook and turn. When coupled with the added capabilities, driven by automation, employers can leverage the best of both, to boost their businesses' productivity.

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