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The future of work: How Automation and AI are reshaping employment

- A) Introduction
- B) Future of work in the eye of Automation and AI
- C) Automation and AI are reshaping the future of work with both positive and negative impacts on employment
 - 1) Automation and AI are turning a lot of jobs obsolete
 - (a) Routine and repetitive works have been replaced by machines
 - (b) AI-modeled robots ^{and chatbots} are replacing humans
 - 2) Automation and AI enhance income gap
 - (a) Middle and low skilled labor ^{face} job displacement or inadequate pay
 - (b) high skill labor charges exorbitantly.
 - 3) Automation and AI cause dehumanization of work raising ethical concerns in workplace
 - (a) Algorithmic bias has hindered ~~equality~~ ^{equity} in employment opportunities
 - (b) Unauthorized access to data has raised privacy concerns
 - 4) Automation and AI replaces permanent jobs with temporary and transactional jobs causing job insecurity and threatening employment benefits
 - (a) remote and gig economies are efficient thus need of permanent jobs is diminishing ^{demand of} decrease in traditional workforce

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on permanent basis

5) Automation and AI are enhancing productivity in the work

a) Automation of routine tasks brings efficiency and precision

b) AI-robots work 24/7 without getting tired

6) Automation and AI open new avenues for employment opportunities

a) Diverse fields have emerged due to AI's integration into work

b) Human-machine collaboration ^{handling and administering} jobs are emerging

7) Automation and AI have enriched gig and freelance economies

a) AI and automation have expanded to global reach of these economies

b) Gig and freelance economies have turned more efficient and precise

8) Automation and AI have strengthened innovation in the work

a) highly skilled individuals are employed

b) Human machine collaboration augments creativity

D) There is dire need of policy measures to reap the benefits of automation and AI

11) Reskilling and upskilling is ultimate remedy strengthening of STEM education and vocational training

12) Protection of unskilled and low skilled labor

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a) Idea of universal basic income (UBI) needs implementation

3) Global governance mechanisms to address the ethical concerns

a) Universal charter to provide rules and regulations regarding automation and AI in employment.

E) Conclusion

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Just as the Industrial Revolution revolutionized work by replacing hand labour with machines, today's rise of AI and Automation promises to reshape the future of employment in ways man has never seen before. Therefore, future of work faces tectonic shifts as man is on the verge of great transformation. AI and automation are attributed with both positive and negative implications on the employment's landscape. Proponents regard Automation and AI as among humanity's greatest achievements. Critics, on the other hand, view it as a modern day Frankenstein's monster given the fact that ~~there~~ cause a spiral of unintended consequences. Therefore, it is crucial to fully understand both the positive and negative aspects in order to grasp how AI and automation will shape the future of work.

Automation and AI are blamed for job displacement as these rendered many of the traditional employment opportunities obsolete by inculcating machines in place of human labor. Additionally, Automation and AI are criticized for widening the Gulf between the rich and the poor specialized skills demand exorbitant salaries but low skill labor finds themselves increasingly displaced. Despite those, AI and Automation are paving the way for enhanced productivity. Replacement of human with machines brought more efficiency, precision and accuracy in the working atmosphere. Moreover, Automation and AI opened and expanded new avenues for employment opportunities which were

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once never thought to exist. Furthermore, the
gig economy and freelance mechanisms are
expanding their horizons ^{due to} ~~of~~ AI and Automation
However, to reap the benefits from AI and
Automation, there is the need of policy measures.
Reskilling and upskilling are the tenets upon which to
erect the edifice of future of work. Thus, Automation
and AI are often seen as a double-
edged sword bringing both promising
opportunities and significant challenges to
the future of work.

Self driving cars replacing truck
drivers, chatbots handling customer services
and robots assisting in surgeries were
a few years ago, only existed in
science fiction. However, ^{these are} ~~it is~~ becoming the
emerging reality of modern workforce. Automation
and AI carry both positive and negative
implications for the future of work and employment.
Although these pose a significant threat to
the traditional and manual jobs, ~~too~~ AI and
Automation ^{has} opened avenues in multiple and unique
realms which never existed some years ago.
Such as AI specialist, Data analyst, Machine
Learning engineer, Robotics specialist etc
It is also to be noted that Automation and
AI have created income inequality. As
low skilled laborers earn very little but skilled
earn huge sums erecting a widened gulf
between the rich and poor in society. Additionally

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~~Automation and~~

AI have replaced permanent jobs with temporary and transactional jobs. These temporary jobs are devoid of social and welfare benefits, posing another threat to the poor in the society with regards to job security. Despite these, ~~possible~~ ^{possible} implications should not be ignored. Automation and AI have enhanced productivity and creativity thus, strengthening innovation in the work and employment landscape shaping the way for further transformation for the good of humans.

To begin with, Automation and AI are rendering many of the traditional jobs obsolete. As routine and repetitive works have been replaced by machines. In legal domain document review, historical study and analysis are now being carried out by machines. Besides, AI modeled robots and chatbots have occupied various domains traditionally limited to human labor. Thus, all the people who were ~~were~~ ^{were} once employed due to absence of automation and AI have now been obsolete.

A Harvard study revealed that Amazon warehouses once filled with men have now occupied by robots who carry out tasks such as packing, relocating and shifting traditionally associated with human labor. Besides, customer services are not provided by AI powered chatbots ~~again~~ replacing man. Thus, AI and automation have

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turned many jobs obsolete.

Additionally, Automation and AI are criticized for their role in enhancing income gap. The middle and low skilled labor face job displacement or even if successfully ~~secure~~^{secure} a job they are left with inadequate pay. This is causing a widening gap given the fact that the skilled labour receives exorbitant amounts as pays due to their high demand.

Thus, Automation and AI have created a polarization in the income landscape by enhancing the riches of the skilled labor at the same time rendering low skilled labor helpless by eradicating their domain of work. According to a report by McKinsey Global Institute Automation and AI can cause wage polarization. Workers in high-skill sectors see their incomes rise. In contrast, workers in low skilled sectors may experience wage stagnation or job loss. Thus, AI and Automation are accelerating income inequality and wage polarization.

Adding on, Automation and AI are also causing dehumanization of work raising ethical concerns in workplace and employment landscape. Humanized work has been replaced by Algorithms and AI has been proven

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by various researches that there exist algorithmic bias which in turn hinders equality in employment opportunities. Besides, it ~~allows~~ ^{allows} discriminatory attitudes to prevail in the workplace environment by favoring certain people based on color, sex, race or religion. Moreover, the unauthorized access to data has raised privacy concerns. Employee's data is unsafe besides firms are insecure due to ^{the} existence of various tools that enable access to ~~work~~ ^{private} data. AI systems in Amazon warehouses track almost every action of workers including bathroom schedules this is a serious breach of individual's privacy. Thus, dehumanization of work raises ethical concerns in the workplace and employment landscape.

Adding further, Automation and AI ^{shifting jobs as firms are} moving towards replacement of permanent jobs with temporary and transient jobs. These temporary jobs are causing job insecurity besides depriving the workers of employment benefits such as insurance, old age benefit or health security. This is due to the rise of gig economies as they provide efficient means at reasonable pay scales for the big firms which outsource their work to these gig and freelance economies. Thus, gig and freelance economies provide companies flexibility and cost-saving

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rendering permanent jobs obsolete. Besides, many of the permanent nature tasks can now be performed using AI modeled apps this further diminishes the demand of permanent nature of jobs. **A case study in this regard is of the Uber and the transformation of taxi industry** where permanent employees of taxi were displaced by Uber's gig model. Anyone with a car and smartphone can become ~~an~~ an temporary basis. Thus, Automation and AI replace permanent jobs with temporary and flexible ones.

Heading on, Automation and AI are enhancing productivity in the employment landscape and in the nature of work. Automation of routine and labour intensive tasks brings efficiency and precision in addition to enhancing accuracy. An Oxford study revealed that AI powered tools and sophisticated machines were able to outperform human radiologist in the diagnosis of breast cancer. As automation brings with it efficiency, accuracy and precision. Moreover, the automated machines especially the AI-powered ~~robots~~ ^{robots} are able to work 24/7 without getting tired. This further enhance the productivity and punctuality of the AI driven tools and automated technologies.

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Amazon reported that its Automated packing System modeled by AI has enhanced the speed of packing process. Therefore, it would not be an overstatement when it is said that AI and Automation brings productivity.

Adding on, Automation and AI not only cause job loss but also open new avenues for employment opportunities. Multiple new fields ~~of~~ ^{in job market} ~~are~~ have emerged due to the new nature of working environment. AI's Integration into work has created new jobs in technology and AI development such as AI specialists and Engineers, Automation engineers and AI trainers. Besides, human machine collaboration has also given rise to various jobs such as in health sector where Medical AI specialists are required to assist doctors in the utilization of AI tools for various functions. Many of the firms are now employing AI chatbots to handle customer services. This also creates opportunity for AI and Automation Integration specialists which support the smooth handling of chatbots. Thus, Automation and AI have opened multiple avenues for new jobs. World Economic Forum estimated that 97 million new roles would be created by 2025 due to emerging technologies of AI.

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Therefore, there is dire need to understand that Automation and AI are not eliminating humans from job markets but accommodating them in different ways.

Additionally, Automation and AI have enriched gig and freelance economies by expanding the global reach of these economies. In addition to making these economic models more efficient and precise. The integration of AI and Automation has solidified the global reach of gig workers by providing access to global talent pool. Besides, AI powered translators tools like DeepL allow workers in gig economy to break ^{language} barrier ^{thus} enhancing the working capacity in various languages from across the world. AI models have streamlined payment systems thus further enhancing the strength of freelance economy.

According to Finer, its use of AI and Automation boosted worker productivity and client satisfaction, thus Automation and AI have enriched gig economies and freelance markets immensely.

Adding more, Automation and AI have strengthened innovation in the work and employment landscape. There are various reasons for this, firstly

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highly skilled individuals are employed in the workforce which results in increased creativity and innovation. Their skill and potentials augment the innovation in the work. Furthermore, these individuals provide specialised skill ~~to be~~ ^{which fosters disciplinary} innovation and technical excellence. Secondly, human-machine collaboration is resulted due Automation and AI's integration in work, further augments creativity. As it combines both the strengths of man and machine and nullifies the ~~weakness~~ ^{weakness} of machine and man. Humans are best at intelligence while machines are efficient at doing routine works this collaboration between human and machine paves the road for innovation and creativity. **AI powered diagnostic tools outperformed human diagnostic. AI has thus revolutionised diagnostics.** This, AI and Automation are paving the way for innovation and creativity in the future work.

Although AI and Automation provide diverse opportunities, there is dire need of policy measures to reap the benefits. The current need of the society is reskilling and upskilling as it has become the ultimate necessity of today's society. This reskilling and upskilling can be carried out by strengthening STEM education and by

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formal education. STEM education and vocational trainings are the basic tenets to erect the edifice of skilled labor market. These will pave the way to eradicate income disparities in addition to accommodating various people in the employment's net. Germany provides vocational training in addition to formal education to adapt to the changing job market. India is investing heavily on STEM education to enhance the skills of its young generation. Thus, reskilling and upskilling is the ultimate necessity.

Adding on, there is dire need of building consensus to protect unskilled and low skilled labors. Universal basic income is a step forward in this regard however, it needs proper policy measures and implement reforms. Unskilled labor has been the biggest victim of the Automation of AI world's governments need to consider the severity of this issue. According to World Economic Forum 85 million jobs are predicted to vanish with Automation and AI. Thus, it is necessary to accommodate the jobless people in the employment net by building global consensus.

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Adding on, There must be a global governance mechanism to address the ethical concerns emerging due to AI and Automation. The dehumanization of work has given rise to ~~problems~~^{ISSUES} such as Algorithmic biases and breach of privacies. There is thus dire need of universal charter to provide rules and regulations regarding automation and AI in employment. The Economist suggested for global governance of AI and Automation in these words Just as UDHR provides blueprint for Humanitarian Laws there is dire need of Universal charter to regulate AI and Automation in the future's work and economic landscape. Therefore, policy makers need to unite themselves for this crucial task.

To Sum up, AI and Automation are shaping the future of work both in positive and negative ways. For instance AI and Automation are displacing multiple manual workers but at the same time providing job opportunities in new and emerging fields. Although, dehumanization of work has given rise to multiple issues related to privacy and discrimination these could be reduced by proper policy measures and ethical guidelines. Additionally, AI and Automation are creating job insecurity.

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through transitioning to temporary jobs and ending permanent nature of jobs. However, ideas such as ^{those of} universal basic income and upskilling initiatives are paving the way for economic security and employment opportunity in these market economic conditions. There are further opportunities in the realm of Automation and AI as these ~~are~~ are strengthening productivity, innovation, creativity, precision and accuracy in the employment landscape and working environments. Furthermore, the human-machine collaboration is considered a gamechanger for the innovative landscape. However, to reap the benefits and to eradicate the negative implications, there is dire need of policy measures. ^{when operating} ^{proper} Additionally through regulations and laws, AI and Automation are considered to be beneficial.