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CAN AI REPLACE HUMAN EMPLOYEES IN NEAR FUTURE

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ABSTRACT

Artificial Intelligence is delivering itself a part of day-to-day life in various industries. We are already living in this automation world where approximately three-fourth population practice it in several ways, machine learning amplifies the way we live, and copying the way we perform tasks. Machine learning is practised in an extensive range of applications consisting of the medical industry, speech and image recognition, optical character recognition, web or cybersecurity. To proceed increasing productivity and consequently stay on height in the productivity, companies and nations will necessitate embracing the opportunities that AI promises. In our analysis, we find that AI is not a menace that will enhance unemployment, but preferably a technology that can assure that our jobs or employment. AI and man work together for promising opportunities for the rapidly growing world.

1. INTRODUCTION

Today in this AI technology flouring world, where it is getting used to performing tasks that range from trivial to monumental. It is intensifying software applications whether it may be AI cameras, robotics, image sensing, drone tech and financial asset management. AI has some fantastic applications in diverse fields of human life ranging from education, health, agriculture, financial inclusion. As automation edges into factories, workplaces and houses, AI is delivering itself a part of day-to-day life in various industries. We are already practising AI in our daily life, for example, Alexa- Amazon, Siri- Apple, which simplifies our daily requirement.

AI is paving the path for new and better opportunities for humanity. AI, that has the potential of quick and promptly executing the complex tasks eventually emphasizing the workforce by improvising the worth of genuinely human synergies – soft skills which ninety-two per cent of expertise professionals believe express the most significant amount or pretty hard skills. AI touches every edge of technology like in agriculture by image sensing, drone surveillance along with fostering relationships with customers who have communicated with intelligent advertising

or ethically reviewing social media posts. AI alleviates several businesses needs; it will solely mean having longer to shape relevant decisions, because of machine-led penetrations doing the groundwork.

Though because the applications of AI accelerate, more and more people are beginning to wonder if it is getting to obliterate the value of social skills and experiences in several tasks. What happens to the expertise and skills when everyone holding a magnified AI-enabled service device must opt for? What occurs to the talents and inspirations of an experienced person when AI is trained to everyone and advise people to make decisions recommended?

Our research focuses on the crucial point regarding the flourishing automation world that there is any possibility of Artificial Intelligence to replace human interaction. Additionally, analyzing the dilemma about automation technology is going to eliminate the human workforce and substitute employment opportunities.

2. LITERATURE REVIEWS

The fear of unemployment due to mechanization or automation has its root from the very beginning of industrialization yet not recognized. Presently the world is shifting toward an approximately fully automated stage of development that should be adequately initiated by next decade. The automation assists in doing several things, making work more comfortable and effortless, time and cost-effective, less labour intensive which allows economic growth, new opportunities of technical employment and skilled workforce.

In the present scenario, the prediction assumes that AI will reduce the masses of jobs and does not recognize how this dynamic will demonstrate in the new emerging economy. However harnessing advanced technology like artificial intelligence capable of resolving difficult problems promptly despite their productivity, time efficiency they are incapable when it comes to human values, sentiments, wisdom, knowledge, and experience.

Accelerating automation, and the resulting technological unemployment can be socially disruptive on an immense scale. Artificial intelligence is modifying a business objective and having the most magnificent impact when it grows human workers instead of replacing them. However, future leaders will be those that inhold intelligence, reforming their operations, their markets, their industries, but no less critical their workforces. The machine-learning program is not merely about recognizing patterns and associations in data, although it is about actually finding the causal link between man and the machine.

The robotics and artificial intelligence will penetrate humans life enormously till 2025. Advanced technology might have an impact on the working procedure, its methodology, work culture, but history reveals that it has never been the reason for human replacement. The literature survey finds that several researchers still show probability of replacement of humans by robot machines though identified that humans will adjust to these shifting technologies by inventing solely new work, and adapting or reskilling uniquely human capabilities.

Multidimensional applications and techniques are widely embraced within artificial intelligence, such as from speech, pattern or image recognition to genetic algorithms to deep machine learning. AI cognitive services can expand social work including natural language processing, i.e. the method through which machines can recognize and interpret language as practised by humans, machine learning-based algorithms that empower systems to learn, and machine vision. The intelligence technologies are proliferating, assisting in decision making, critical problem solving, multitasking and multi dimensioning. Post-industrial economies are promptly entering into a second machine age gratefulness to superior smart technologies and its edge flourishing that are displacing human workers across multiple fields.

In particular, younger associates tend to be more realistic and anxious about their prospects, hindering a notable rise in AI-enabled imbalance and a collapse of social adherence. People are afraid regarding this powerful technology prejudice that it is overwhelmed in the hands of a few and immense gulf among having and having notes. Still, there is some shaking from this modern and future workforce.

3. HOW AI WORKS?

MACHINE LEARNING

Machine learning is one of the relevant and most significant applications of Artificial Intelligence (AI). Its main objective is to provide the ability to the machines to take data and 'automatically learn'. Currently, it is the most promising tool in AI equipment for businesses.

Machine learning systems can promptly implement knowledge and training from comprehensive datasets to excel at facial recognition, speech recognition, pattern recognition, language translation, and various other operations to perform. Machine learning enables a system to acquire, to recognize patterns on its own and perform predictions counter to hand-coding a software program with definite instructions to accomplish a task.

The process of learning commences with observations or data, such as patterns, direct experience, or direction, in order to seem for models in data and make effective decisions in the future based on the standards that are provided. The ultimate goal is to learn the computer automatically without human involvement and improve actions accordingly.

3.1 DECISION MAKING OF THE MACHINE

This incorporates understanding customer wants and aspires and aligning products to those requirements and desires. A handle on improving customer performance is essential to make the most suitable and desirable marketing decisions. By granting employees with made-to-measure information and guidance, AI can assist them to reach better decisions. This can be remarkably valuable for operators in the trenches, where performing the right call assures the significant and immense impact on the bottom line where usually individual machines might fail.

This technology has radically transformed the decision-intensive method of managing industrial equipment. It enables the system to make decisions based on machine description according to its suitable condition, the working surroundings and collect data after analyzing the machine loopholes whether mechanical or software is repairing requisite it identified and reported. The decision-making feature also predicts the cost or economic feasibility and delivers reliable information after keen observation.

3.2 HUMAN VS ARTIFICIAL INTELLIGENCE MACHINE

	Human Intelligence	Artificial Intelligence Machine
Nature of Learning	Humans learn from their environment and become adaptive accordingly.	It depends on how the machine is designed, opt for the machine learning process, that copy human behaviour.
Memory Utility	Learn from experience, use content, experience and thinking all based on IQ	Machine uses built-in instructions, designed by scientists and worked accordingly.
Creativity	Human intelligence is far ahead as he is the only responsible for the developing, innovation and creating or transforming the world by technology.	It highly depends on the machine learning process with a lack of creativity as it feeds about dos.

Capacity	Human thinking capacity is obviously far behind compared with AI.	AI opt as a supercomputer so its capability and capacity are far ahead than human.
Multitasking	It needs immense skill, training effort, time and money for humans to work multiple tasks.	It is promptly performed multitasking with effective cost and time optimum features.
Energy efficiency	Human body needs food, water, sleep along with medical conditions which determine her energy efficiency.	It is a machine which depends on electricity to charge itself that all it requires, being highly energy efficient compared to humans.

3.3 REAL WORLD AI MACHINES TILL 2020

Name Of The Companies And Machines

The Amazon Web Services offers AI enabled services like Lex, a business version of Alexa; Polly, which converts text to speech; and Rekognition, an image recognition assistance.

Google Cloud Platform sells various AI and machine learning services to business. It has an industry-leading software plan in TensorFlow along with having its own Tensor AI chip project.

IBM Watson, including an AI-enabled cognitive service, AI software for service providing, and scale-out systems intended for delivering cloud-based analytics and AI services.

Real AI Implementation machines -

- HDFC Bank has developed an AI-enabled chatbot named as EVA (Electronic Virtual Assistant), manufactured by Bengaluru Senseforth AI Research.
- Nomura company of Japan introduced a new stock trading AI-based system called Shingan.
- Berlin-based agricultural tech organization PEAT has developed an AI application that identifies possible weakness and nutrient deficiencies in the soil through images named as Plantix.

Analysis productivity of AI machine vs Human

Artificial intelligence can enhance productivity by 40% or more. Through data accumulation, automation, decision making, and cybersecurity, AI can heighten profitability by an aggregate of 38%. This can aid free up precious time for an employee which utilizes their time in constructive and creative work which further explores new opportunities for human life.

Human productivity measures can not only be compressed in a few parameters like economic feasibility, company growth instead it embraces immense potential like creative mind, moral values, sentiments, wisdom and knowledge and above all adaptive nature based on experiences which can not be possible for any automated machine.

3.4 EXPENSE ON AI MACHINE VS HUMAN

As 'human expenses in terms of training or occupying skill' is far cheaper compared with manufacturing an AI machine. However, if we move toward energy efficiency and capabilities, then humans need nutrient intake else prone to disease driven, which is time and cost consuming. These things are not happening with AI machines.

4. FINDING & DISCUSSION

We find that AI-enabled services are market boosting technology which eventually termed as revolutionary innovation. Our analysis suggests that there persists a strong probability that expediting automation will prompt a change for millions whose jobs it replaces, their families, and the entire global economy. We find that either new jobs or massive retraining will satisfy to provide sufficient employment as AI reduces complex skills passively than people can readjust. Moreover, comparatively few people occupy significant creativity, leadership, or entrepreneurship skills at a high level and demand to form a career.

Artificial intelligence is modifying a business objective and having the most magnificent impact when it grows human workers instead of replacing them. However, in the future, it upholds intelligence, reforming operations, markets, industries, but no less critical of their workforces. The machine-learning program is not merely about recognizing patterns and associations in data, although it is about actually finding the causal link between man and the machine. It acts as a blessing for humans when both work collectively.

5. CONCLUSION

AI technology is used to develop diverse divisions comprising finance, education, health, media, marketing, and more. Machine learning is practised in an extensive range of applications consisting of the medical industry, speech and image recognition, optical character recognition, web or cybersecurity. To proceed increasing productivity and consequently stay on height in the productivity, companies and nations will necessitate embracing the opportunities that AI promises.

AI is not a menace that will enhance unemployment, but preferably a technology that can assure that our jobs or employment will not be moved to low-cost labour countries. Spending in cognitive automation for manufacturing will expand the productivity of workers and consequently also ensure the jobs in engineering and R&D. We may conclude that artificial intelligence and man work together for promising opportunities for the rapidly growing world and can not replace human employees however generate new opportunities for them.

6. BIBLIOGRAPHY

- https://www.accenture.com/t00010101t000000z__w__/_acnmedia/pdf-84/accenture-collaborative-intelligence-2018.pdf
- https://jfsdigital.org/wp-content/uploads/2017/01/JFS212Final%EF%BC%88%E5%B7%B2%E6%8B%96%E7%A7%BB%EF%BC%89-6.pdf
- https://5y1.org/download/6042b8dba7ffcec7cac5f4b9cc7d2264.pdf
- https://www.sciencedirect.com/science/article/pii/S0007681318300387
- https://knowledge.wharton.upenn.edu/article/reimagining-work-age-ai/
- https://www.edureka.co/blog/artificial-intelligence-applications/
- https://www.datamation.com/artificial-intelligence/top-artificial-intelligence-companies.html
- https://www.educba.com/artificial-intelligence-vs-human-intelligence/
- https://towardsdatascience.com/artificial-intelligence-vs-machine-learning-the-bottom-line-eb8b0bf52fc4