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AI and Humans: Replacement or Collaboration?

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Abstract: ***AI is rapidly becoming a part of modern organizations, bringing with both excitement & concern. A common perception formed by the media nowadays is that soon AI will replace the humans from their workplaces. As AI continues to infiltrate the modern workplaces, we need to stop asking ourselves: " Are human workers being actually replaced by AI instead it's time to ask how both the humans & AI can work together to bring a better outcome. This essay makes the case that AI is not a replacement for human skill but rather a potent instrument which is used to enhance the human's creativity.***
Combining human creativity with the strong computing power of the AI system is the perfect solution to solve modern organization problems, whether it is marketing, finance, production or supply chain.
Keywords: Artificial Intelligence, Collaboration, AI tools

I. INTRODUCTION

From a theoretical idea AI has quickly developed into a revolutionary force in modern world. The idea whichwas once imagined in only science fiction is now a part of daily world activities whether it is business, healthcare, or education. Technologies which seem futuristic are now a part of daily business operations including hiring, production, marketing or any business activities. Nowadays organizations rely on AI as it offers a variety of functions including customer service through chat bots, demand forecasting, frauddetection, customer relationship management, supply chain management and even supporting many strategic decisions like product planning, expansion into new market, product withdrawal, re-launching of product, etc. Employees, managers & legislators naturally worry as the AI system is becoming powerful day by day but the actual question remains the same: "Will AI eventually replace humans?" To answer this question we have to first understand the collaboration of humans & AI.

Humanshave unique personal experiences that only they can understand & provide output on that & their responses are unique according to different situations.

The AI tool can identify patterns in vast data sets, they offer key findings, quick summaries and similar output to different situations according to the data set they have. AI is good at doing repetitive tasks but still it is not able to do creative thinking, it can help in taking strategic decisions by analysing the data but the main decision is taken by the humans only. So, AI only enhances the human creativity but cannot be creative by itself.

Human & AI collaboration brings synergy between human intelligence & AI capabilities to achieve outcomes which cannot be accomplished alone.

Humans have emotional intelligence and creative thinking while AI excels at processing large amounts of data, automating repetitive tasks and offering insights that help in decision making.

II. KNOWING WHAT AI IS AND IS NOT CAPABLE OF?

AI becomes a very important tool in business as it offers so many functions that make the execution of daily operations so easy. Everyone worries that soon it will take the positions of humans but one thing humans also have to understand that AI is developed by humans to make the humans tasks easily not to take over their positions.

However,AI is still capable of doing so many things in an efficient way as compare to humans. As a result, it is important to investigate the jobs whichareperformed by AI independently and the jobs which are performed by humans independently. The things which AI can do independently falls under the what AI can do well in the organizations it includes identification of patterns in large datasets and then perform a similar activity based on the previous pattern it executes the task effectively and efficiently.

AI works well in automation of tasks, identification of patterns, taking daily operation decision,analysing large datasets,chat bots to solve customer queries and responding to customers based on previous data.

However, there are many jobs that need human assistance and those jobs which need human assistance are the one where the limitation of AI lies.

AI has many shortcomings despite its potential. It lacks emotional intelligence, awareness and societal consciousness. It is a system which totally depends on datasets and algorithm created by humans.

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AI is not capable of creative thinking, fails to understand society,culture, and ethical implications. It is unable to understand human emotions and various factors such as health,performance,motivation, attitude and perception of employees,customers, higher authority who plays important role in an organization.

III. DOES AI REPLACE JOBS OR TASKS IN NEAR FUTURE?

This is the major concern of most of the people that will AI lead to job loss. People working in manufacturing sector, call centres, service sector feared most about it as they have to perform the repetitive tasks every day and with the day by day improvement in AI increases their concerns.

But even if AI is efficient in repetitive tasks still it cannot do the tasks which involves emotional and critical thinking, it fails in ethical implications,considering societal perspective that is also considered at the time of performing activity.

AI is a tool that supports the human to perform, saves their time by doing small chores which are a part of a big activity but the rest and important part is always done by human which include critical thinking, emotional intelligence for example if a marketer wants to launch a new product then he first identify the need of the customer, do analysis then understand what could be the possible solution of this problem and then offer his product as a solution which cannot be done by AI it needs instructions of humans to operate. In this way we can say that AI is just a tool that makes the human work easy but AI cannot replace humans.

IV. REAL – WORLD CASE STUDIES: AI IN ACTION ACROSS INDUSTRIES

To understand the concept that whether AI is going to replace humans from workplace or it's a tool to strengthen human efforts there are following examples across industries which clears the concept of AI which explains that power of AI lies in collaboration , not in replacement.

1) Healthcare: Enhancing Diagnosis , Not Replacing Doctors

In the healthcare sector, there are many shortcoming like taking time in X-rays, MRIs and CT scans. Also, there is need of doctor to look for every activity to operate the machines and doing the chores which is a time taking process and thus, doctor is also engaged in the whole process. But now with the AI tools, it is easy for professional to analyze and interpret the data where the doctor remains the central system of the process but his works become more easy.

2) Financial Services : Speed Meets Human Judgement

In banking and finance sector AI plays important role as there are millions of transaction everyday and AI helps in detection of fraudoridentifying any error because it analyseslarge datasets and determine patterns that helps in result interpretation, helps in taking accurate financial decisions, solving customer queries using chat bots, loan decisions, maintaining customer accounts, introduction of automatic machines which offers multiple services.

3) Retail : Smart Systems with a Human Touch

In retail businesses,AI is used for doing demand forecasting demand, managing inventory, keeping customer purchase records, optimizing supply-chain to increase the productivity of the whole process. But what human do is the value addition that AI cannot do.Humans not focuses only on selling but also takes care of their customer preferences and how they can enhance their customer experience which helps the business to maintain the long term relation with their customers.

4) Manufacturing: Precision with Human Expertise

AI driven manufacturing increases the productivity of the process as manufacturing system works in planned order. It detects defects easily, increases accuracy, but when the process becomes customization oriented then there is a need of collaborative effort of human and AI to handle the operation.

Across all industries there are mainly two types of tasks first which need humans to perform a task which includes critical thinking, strategic decision making, emotional understanding and ethical thinking and the second is AI efforts which increases the productivity of the process by strengthening the human efforts and saves the time that helps the organization in waste reduction, time saving and achieve the organizational goals effectively and efficiently.

V. WHY HUMANS REMAIN IRREPLACEABLE IN ORGANIZATIONS

These section highlights why AI cannot replace humans and what are the capabilities humans has thatAI cannot replace are as following:

1) Human Judgement and strategic thought

AI can handle and analyse the large amount of data but humans can take long term strategic decisions, which AI cannot.

When the decisions are taken by the humans, they consider all the things its impact on people, organization, ethical implications which AI cannot and also their judgement is based on their experience and learning.

2) Leadership and Emotional Intelligence

When it comes to humans, leadership is one of their interpersonal skill where they have the ability to lead people, to guide them, to motivate them to work in certain direction, there they understand the emotions of their teammates, where are they lacking. The ultimate objective is not only the goal, they want to achieve the goal along with well-being of their teammates.But AI don't consider human emotions that's why AI cannot replace humans.

3) Ethics and Responsibility

AI take decisions based on algorithms and set of commands which are given by human. It don't have its own understanding and that's why it cannot replace humans because humans take decisions on the basis of morality, ethics and their responsibility towards the organisation and society.

4) Creativity and Innovations

Although AI take decisions and generate output on the basis of the datasets, but innovation and creativity doesn't come into picture. It only recognises certain patterns takes decisions. But, humans have creativity and innovations, that can lead to decisions in entirely new situations.

Overall, this shows that AI can improve the efficiency of the human actions, make it more convenient. But when it comes to taking decisions to solve real world problems, doing something creative and innovative or we can say the revolution in the real world it can be done by only humans not AI.

VI. COMPLEMENTARY HUMAN SKILLS IN AN AI-DRIVEN WORKPLACE

As AI is taking over the repetitive,routine, and date intensive tasks with new improvements in the algorithms thus, if AI and human intelligence work together, they can achieve the goals more effectively.

1) Critical Thinking and Complex Problem-Solving

If AI is used with human intelligence, then the large and complex business problems which needs multiple situation analysis, complex reasoning can be done easily with the combination of human mind and AI.

2) Interpersonal Communication and Collaboration

AI can manage the daily instruction, task reminders handling while human interaction make the conversation more meaningful and understand the situation of organization. The human skills such as listening,negotiation, persuasion and conflict resolution gain greater importance while AI is managing the repetitive instructions tasks, giving recorded instructions to employees. Both plays a crucial role in ensuring smooth functioning of organization.

3) Adaptability and continuous improvement

With the rapid changing environment, it is very essential for employees to learn new skills that are required to operate the AI. Moreover, everyday there is new update in the AI features to make it more effective and to use the AI effectively the human needs to stay updated with the rapid changing technology. Also, organizations prefer those employees more who are more tech oriented and keep themselvesupdated with the technological changes.

4) Higher-Order Creativity and Innovation

True innovation comes from human thinking while helps in the execution. Innovative product designs are created by humans and AI gives references on the basis of the datasets they have,AI is good at error detection, pattern recognition and also outline making which gives the base to the human imagination. It creates different possibility of the problem or the core idea created by human and along with both efforts, the results become better and more appealing.

In conclusion, the rise of AI not reduces the importance of humans instead of that it fuels the strength of organization if they use it smartly along with right – skilled employees.

VII. PRACTICAL IMPLICATIONS

For organizations who wants to implement the AI fully, they should not just focus on technology adoption but also focuses on their employees to get the right skills to operate AI so that they can get the competitive advantage and utilise the technology.

The organisations must focus on creating an organisational culture which promotes innovation,creativity,collaboration, emotional intelligence along with the technological adoption because *technological adoption is not for human replacement but it is to strengthen human capabilities*.

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By investing in such technique, skills and technology, it will make the organization stand uniquely as compare to their competitors. It should be a balanced approach where the organization is utilizing both the artificial as well as human intelligence to achievetheir results effectively.

VIII. ORGANIZATIONAL IMPLICATIONS OF AI ADOPTION

While the discussion focuses more on collaboration of humans and AI, still the adoption of AI cannot be overlooked. Already, we have discuss how both the intelligence is required for the success of the organization in which one provides the strategic direction to the organization while other helps in the execution of tasks effectively.

1) Retraining and Ongoing Education

The learning of right skill is very important to use the AI. Organizations cannot ignore the adoption of AI; instead of that they should focus on acquiring the right skill to operateAI and they should alsodevelop the capability to interpret the AI driven insights into a meaningful conclusion.

2) Human-in-the-Loop Method

It is the situation in which the AI give all the possible solutions of a particular problem or a situation; but the final decision is taken by the humans. This is called the collaborative approach in which the half part is done by the AI like giving all possible solutions of the scenario and the then the final decision is taken by the human whether to go with the solution or not.

3) Managing change and reducing fear

The introduction of AIbrings the fear that soon it will replace the human force. But the employees and organizations have to understand that the technology comes to help the humans, to make their workflow more efficient and smoother not to replace them.The ones who understand and adopted the change are doing great but the ones who are still afraid are still lacking behind.

In conclusion while the employees are doing their work, the organization must focuses on giving right training to their employees to use the AI effectively.

IX. CHALLENGES AND BARRIERS IN SUCCESSFUL AI IMPLICATIONS

While AI offers immense potential to the organizations to run business activities smoothly, there are still human related barriers which makes the implementation difficult. There are various factors which give unfavourable results, and recognising these factors becomes essential for the smooth and sustainable implementation of AI.

1) Resistance to change and cultural barriers

It is the most critical problem of the organization where employees show resistance to change or learn new skills and techniques which areessential to operate AI driven technologies. They get comfortable with the working conditions and show hesitations to adopt a new technology.

2) Skill Gaps and Training Deficiencies

This is the barrier where the employees lack the necessary skills to operate the AI driven technology. Most of the time, the employees are just concerned about the replacement.They focus on how they can acquire the right skills to use the AI. Also, sometimes the organization focuses on replacing the old staff with the new ones who have the skills instead of giving training to old ones.

3) Problems with the data quality and availability issues

To operate AI successfully, it is essential to provide high quality of data. If the company's data is not structured and linked properly, then the results are also inaccurate which makes the AIinconsistent.

Also, the organizational data is stored at multiple disconnected systems, it requires time and high cost to clean the data, and thus, it is also a barrier.

4) Infrastructure and integration Challenges

Many organizations face challenges due to the antiquated system.To enable AI fully it is also important to develop the infrastructureaccording to the AI system which is costly and almost needed an extra investment. But, smaller organizations and sometimes the start-ups refuse to spend the extra expense.

5) Strategic misalignment

AI is good when it is aligns with the organizational gaols. But when the organization is not clear about their gaols and adopts AI as a market trend, then it creates misalignment where the AI becomes an additional responsibility to handle for the organization and not work as a tool to support the business operations. So, it is very important for the organizations to clearly defines their goals and then adopt AI to achieve them effectively and efficiently.

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6) Ethical And Social Considerations

While using AI it is also important to take care of the ethical and social standards. As we all know AI uses data to give results, but over using AIalso increases involves getting personal information, which is not good maintaining privacy of customers, employees etc. Thus, it is important for the company to consider the social standards.

X. BUILDING A RESPONSIBLE AI FRAMEWORK: PRACTICAL GUIDELINE

Addressing the ethical and social challenges of AI, it is important to build a system which is responsible towards the society and also operate in alignment with the human values, fairness and organisational ethics.

1) Establishing AI Governance structures

Organizations must form a separate body within their organization to take care of such matters. This body shouldcheck the alignment of AI driven results with societal and ethical standards. It should include the technical experts,shareholders, business leaders to take corrective actions.

2) Ensuring Transparency and Explain ability

AI system should promote transparency rather than promoting a “black box” approach. Whatever decisions are taken by AI should be clearly understood by all the members and also the organization should promote that decisions which are further explainable. This helps in build trust among the employees and the higher authorityand also saves the organization from future problems.

3) Conducting Regular Bias Audits

AI systems can unintentionally bias as the decisions taken by them are based on the data provided to them. So, to minimise the biases it is essential for the organization to conduct the monthly or annually audit to identify the biases and correct them.

4) Protecting Data Privacy

Strong data governance is needed for the responsible AI use. Organisation must clearly define what kind of data they needed and also for what purpose. They should take consent of the data owners whether they agree to use it for their use or not. Manipulation of user data also leads to unethical decisions. And employees and customer should provide correct data for accurate results.

5) Involving Diverse Stakeholders

The AI governance team should not be limited to the technical team. It should include business leaders, stakeholders and external experts which leads the AI taken decision towards the ethical direction where the opinion of everyone is considered.

XI. THE EMERGENCE OF HYBRID ROLE AND TRENDS

The organisation must focus on the collaboration of AI and human efforts rather than fearing about the human replacement by AI. With evolving world of technology, they should upgrade themselves to stand in the competitive world.

1) New Professional Categories

They should create new roles for the ones who knows how to operate AI. They should make a different departments in their organization where there is a team of AI technicians who are experts in the AI field so that they can align the AI technology with the human efforts and take the advantage of the technology.

2) Organisational Responsibilities

Organisation plays a crucial role in the AI adoption. As discussed earlier, AI is not a threat but it is a valuable opportunity for the organisation to work on. If the organisation promotes such kind of technology driven culture, then the employees will also feel motivated to learn these skills, they will also try to upgrade themselves. So, it is organization responsibility also to provide such learning type of environment to up-skill their employees.

XII. AI AND HUMANS AS PARTNERS IN THE FUTURE OF WORK

The greatest way to envision AI and humans is the partnership between them. The future of corporate world will become better if both the human and artificial intelligence work in synergy. The humans should not afraid of AI; they should focus on how they can master the skills to operate the AI and use it at its full extent. They should adapt themselves according to the changing technological world. The work which needed time and human engagement now can be done easily by the AI in few minutes, the different possible solutions of a particular problem can easily drawn by the AI. But, the final decision is in humans’ hands. All needed is the rightskilled person who can understand the AI insights and give final decision. So, AI makes the daily business activities easy and smoothes the business operation and by the collaboration of humans and AI, the results will be better.

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XIII. CONCLUSION

So artificial intelligence is not a substitute for human potential; rather it works as catalyst which empowers human efforts and smoothen the flow of business operations.

AI enables a person to engage in high order thinking functions, situationanalysis, data – driven decisions, automation of daily tasks, error recognition, productivity improvement, and many more.

Organisations which adopt AI are more capable as they are investing their resources on a technology which give them competitive advantage as well as sustainable growth.Employees with better skills leads to effective results and also using AI will support their creative and innovative thinking and makes them different from other candidates.

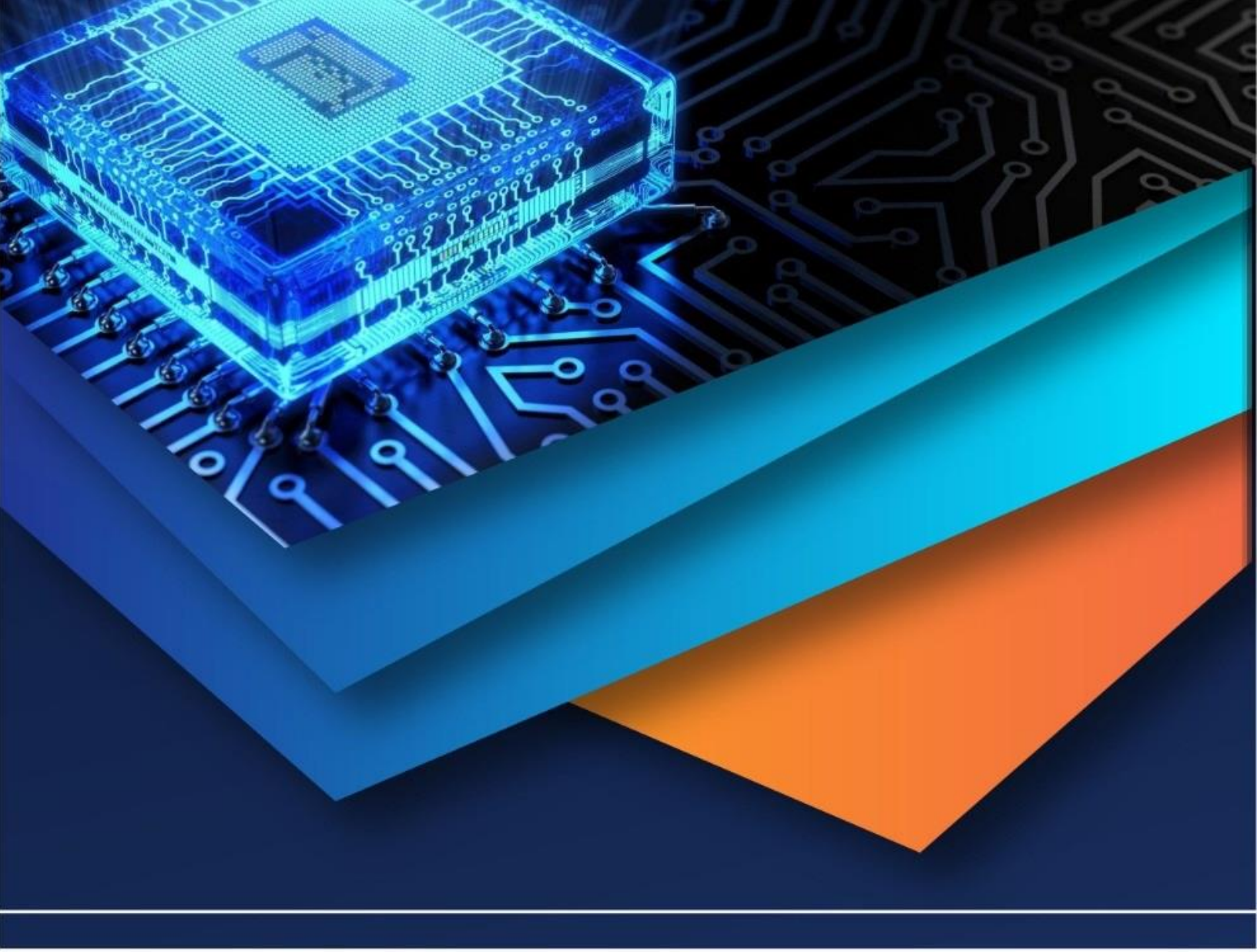
The true challenge doesn't lie in competing with the machines; rather, it lies in how to align them with the technology advancement to become unique. In today's situation, organization values those employees more who are tech oriented. So, people should learn the skills that help them to use AI rather than competing with AI. Once they upgraded themselves and learn how to use AI properly the replacement chances of humans become less.

"And also, one thing to remember is that humans created AI for their convenience, which itself proves that human intelligence is more powerful than artificial intelligence and the growth lie in collaboration not in competition"

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