

## **IMPACT OF ARTIFICIAL INTELLIGENT ON EMPLOYABILITY AND ITS REPERCUSSION EFFECT ON LOWER LEVEL MANAGEMENT**

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**Abstract:** - Recent technology development brought into an integration approach of AI usage in all sectors of economy. This transformation has undoubtedly coined as an engine for growth and productivity improvement but it has led to displacement and reinstatement effect on jobs. As per IBM 77% of the business has integrated AI into its operations but this not only have immediate impact on job loss instead it has great potential for new jobs to be explored.

**Purpose of the study:** - This Study will enable to understand the impact of AI automation in labour market in particular, effect on low level routine jobs. Low level Employees jobs displaced and the skills required to be deployed so that they can be reinstate. As per the Sources, though there are job losses due to AI automation but simultaneously 97 million new job opportunities are created which clearly shows that, there is need to work on the strategies to upskill the labour sector whose jobs are lost. Current focus of the study is to work on the model framework strategy to upskill the labour unit for its reinstatement.

**Practical & social implications:** - AI driven automation strategies are replacing lower level employees from routine jobs and even Forbes statistics shows that AI automation has reduced the wages of employees to 70% indicating the need to upskill labour market to reinstate themselves in coming years. To avoid the problem of unemployment in near future, there is a need to work on strategies to upskill the labour force in a country like India. As per the article of TOI on “The impact of artificial intelligence on labour economics” indicates that there is a need to work on strategies to provide training due to “job polarisation”. Current study highlights on the way to work on the reskilling of the labour force to solve the problem of declining employment prospects.

**Findings:** - Survey method was used to collect the data from employees to understand the jobs which were displaced in different companies. Business model framework is prepared to provide training to lower level employees for their reinstate in companies.

**Keywords:**- AI, Job Polarisation, Labour, Strategies, Seskilling

### **INTRODUCTION: -**

After Demonetisation, it's an era of industry 4 revolution where Artificial intelligence, Machine learning, Big data has captured the market and much talked about its working & effects. AI today is involved in all sectors be it education, finance, household work, healthcare, travel & real estate etc. In 21<sup>st</sup> century more than 77% of work is transformed through technology with a prediction to contribute \$16 trillion to worlds GDP.

It is predicted that there will be more AI powered units almost more than the human population and 70% plus companies will have one of the form of AI employed in their work. According to a recent study conducted by the Institute for Labour Economics, an estimated 1.8 million jobs were lost to AI in 2023 and it is predicted that in the coming year the number is going to be accelerated by 15%. As per the world Economic Forums of future job report 2020 indicates that 43% businesses has reduced their workforce due to technology integration. At the same time it is predicted that 97 million new jobs opportunities will be created in the future due to AI.

### **NEED & PURPOSE OF THE STUDY:-**

There is a need to conduct this study as many lower level and white collar jobs are in endanger, as per the survey of BCG Study report only 1.5% of organization's budget is being invested in employees retention to upskill their knowledge with AI introduction. Thus, there is a need to understand how AI implication is creating negative impact on employment and how industries are supportive towards reskilling of this unemployed lower level workforce. This will also enable to be conscious of the future scope of jobs that will be available in upcoming years.

### **OBJECTIVE OF THE STUDY:-**

- 1) To find out the changes in the needs of the company due to introduction of AI.
- 2) To identify what type of creative training is required for lower level employees with regards to AI
- 3) To find a way to mitigate the negative impact on employment due to AI

### **HYPOTHESIS OF THE STUDY:-**

- H1- AI has badly affected the jobs of lower level management in different sectors
- H0- There is no impact of AI on the lay-offs of lower level management employees
- H2- Curriculum training model of AI can help secure the jobs and upskill employees
- H0- There is no need of Curriculum training model of AI as it will not help any employee in job safety aspects

### **RATIONAL FOR TAKING UP THE PROPOSED PROJECT AND ITS INTERDISCIPLINARY RELEVANCE:-**

There are various challenges imposed due to AI a new technology, which is bringing a change in the employment for humanity across various sector, especially in reference to "low brainy white collar clerical jobs" which are in endanger. The ration behind this study is to understand whether usage of AI will be beneficial for productivity improvement and provide cost benefit or will lead to reduction in job opportunities. What will be the expectation of the enterprises from human to work in collaboration with technology? Where there will be scope of improvement required from humans to save their jobs and survive in AI application enterprises. AI being a new revolution, it is important to understand how financial sectors are using it, what impact it has on the current financial related jobs. So the current study is interdisciplinary in nature which will be important for employees, IT industry, HR recruiters, Digital experts and Data Scientists.

### **REVIEW OF RESEARCH AND DEVELOPMENT IN THE FIELD:-**

#### **Review of Literature:-**

Milanez, A. (2023), "The impact of AI on the workplace: Evidence from OECD case studies of AI implementation highlights positive impact of AI at workplace bringing job quality improvement, greater work

engagement, it talks more about job reorganisation than displacement. It also depicts that skill requirement will be the biggest challenge of AI implication.

As per Deepak Mehta analysis of June, 2023 on “Impact of artificial intelligence on jobs: A comprehensive analysis study shows that AI implication results in job loss for billions of people but at the same time highlights that there is a need to work on reskilling of employees to adopt to new emerging opportunities created by AI. It emphasizes on retraining and reskilling of workforce, proper balancing of human and AI tasks where repetitive work is handled by AI and creative thinking plus emotional tasks handled by human. Thus a proper blend of Automation and human is suggested.

As per Andrew Green “Artificial intelligence and jobs: No signs of slowing labour demand” study shows various opportunities and challenges in public & private employment services. Highlighting on which jobs are in danger what changes are required and suggest certain policies to be introduced for labour market, changes in tax system, policies to strengthen workers and not just to provide benefit to owners, help from social partners are reflected.

### **Research Gap:-**

Various Research articles, journals and research paper is published which shares information about usage of AI and its impact on client, its services and data protection. How AI is used in financial forecast to decide on investment portfolio. Many research articles and papers are on how AI is used in different business sectors for various works and decision making but are mostly secondary in nature. Current study mainly focuses to analyse impact of AI on employability and the need for AI training program.

### **RESEARCH METHODOLOGY: -**

#### 1. Research Design:

a. Qualitative Approach: A qualitative research design will be employed to explore the impact of AI and job losses. It allows interviewing 3 middle and lower level management employees from agency and companies of India.

b. Survey Method Approach: A survey of 50 people in form of Google forms will be taken to find out the opinion and their corporate experience in terms of AI and Job removals in the company.

2. Data Collection: Sampling: A purposive sampling technique and convenient sampling technique will be used by the researchers

#### 3. Data Analysis:

a. The data of Qualitative approach will be interpreted and analysed in written brief format

b. Survey method approach will be interpreted and analysed in pie chart format

4. Ethical Considerations: The research will adhere to ethical guidelines, ensuring respect for the cultural sensitivities and diverse perspectives involved. Proper consent will be obtained from participants, and their privacy and anonymity will be maintained.

### **PRACTICAL & SOCIAL IMPLICATIONS:-**

This study is at most essential to highlight the impact of AI on future job prospects as it will not only lead to lay off of jobs but will create multiple job vacancies requiring upgraded knowledge to handle things in collaboration with technology. It is crucial to understand how old jobs will be replaced by new technology driven jobs, requiring more skills, challenges to survive. To predict where all opportunities will be available

in the field of finance in the future. It is important to study this transforming impact of AI on society & economy at large.

**ANALYSIS: -**

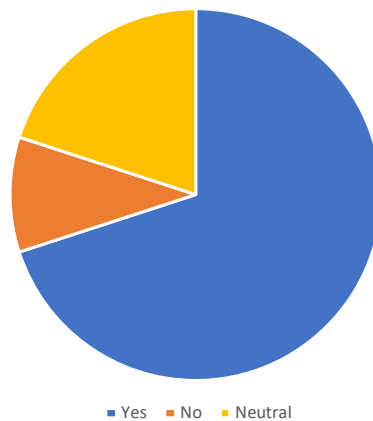
**a. Qualitative Method Approach**

The information of in-dept interview was acknowledged that the impact of AI on jobs in India has been significant. From a positive standpoint, AI has brought increased efficiency and productivity across various industries. Tasks that were once time-consuming and manual were now automated, allowing employees to focus on more strategic and creative aspects of their work. However, it was also recognized that AI has led to job displacement in certain sectors, particularly those involving routine and repetitive tasks, such as manufacturing, customer service, and data entry. This displacement necessitates a shift in the skills demanded by the job market. It was emphasized the importance of a proactive approach in ensuring the workforce is equipped with the necessary skills to thrive in this evolving landscape. Continuous learning and upskilling programs were and will be viewed as vital to helping employees adapt to the changes brought about by AI. Importance to invest in new areas and create jobs that align with technological advancement was also mentioned. A stress on organizations must taking a proactive stance on investing in education, upskilling, and creating an environment that encourages innovation were highlighted as key strategies to ensure the workforce remains competitive and ready for the opportunities presented by the continued growth of AI. Fostering a culture of innovation and providing opportunities for employees to explore these emerging fields was seen as essential.

**b. Survey Method Approach**

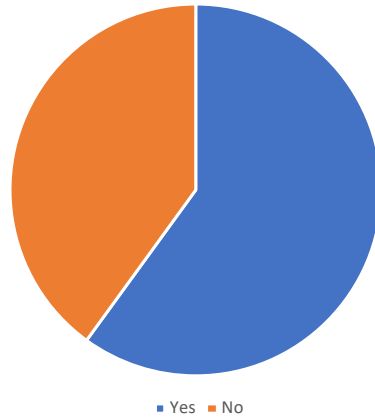
Q.1) Do you believe that AI has led to increased efficiency and productivity in your workplace?

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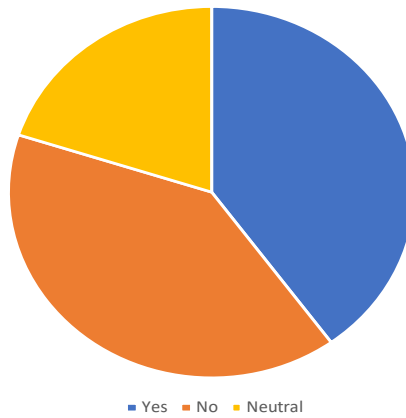
Q.2) Have you personally witnessed job displacement in your industry due to the implementation of AI technologies?

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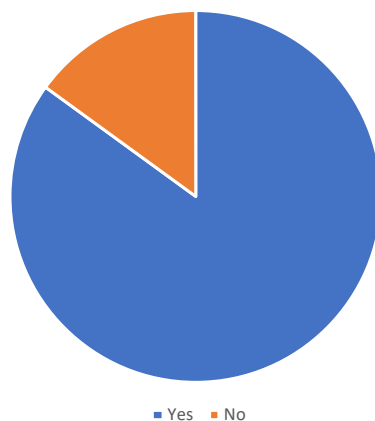
Q.3) Do you think routine and repetitive tasks in your job have been automated by AI?

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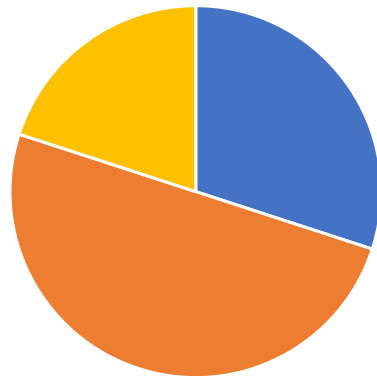
Q.4) Do you feel that AI Upskilling investment has become a necessity for all organisation (Specially for lower level management)?

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Q.5) Have you participated in any upskilling or training programs provided by your organization to adapt to AI-related changes in the workplace?

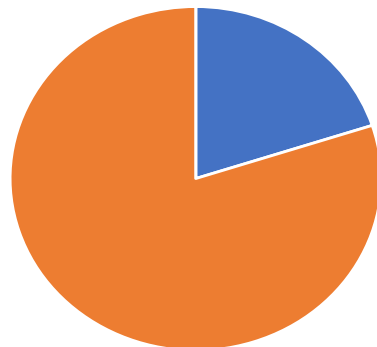
Have you participated in any upskilling or training programs provided by your organization to adapt to AI-related changes in the workplace?



■ Participated ■ Not Participated ■ Participated but felt of no use

Q.6) Do you feel confident that your current skill set aligns with the demands of the evolving job market influenced by AI?

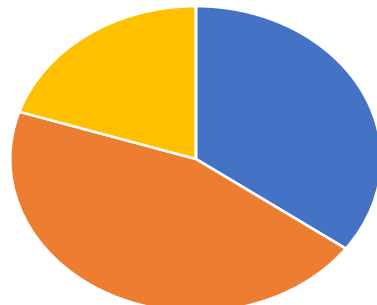
Do you feel confident that your current skill set aligns with the demands of the evolving job market influenced by AI?



■ Yes ■ No

Q.7) Has your organization invested in fostering a culture of innovation to adapt to the advancements in AI and related technologies?

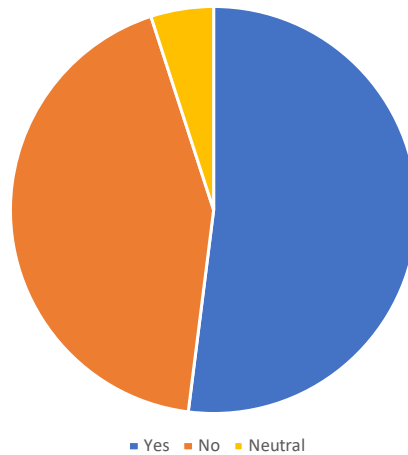
Has your organization invested in fostering a culture of innovation to adapt to the advancements in AI and related technologies?



■ Invested ■ Not Invested ■ Planning to Invest

Q.8) Do you think routine and repetitive tasks in your job have been automated by AI?

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**Interpretation:-**

From the survey the information was obtained that 70% believed that AI had increased the efficiency and productivity whereas 10% denied and 20% remained neutral. A total of 60% of sample agreed that they have seen displacement in jobs in their industry/company whereas 40% denied these changes. Talking about has the AI repetitive tasks been automated by AI it was found that 40% agreed, 40% disagreed and 20% stayed neutral. A majority of 85% of the sample agreed that organization should invest in upskilling their employees by investing in AI courses but when it came to participation in such course only 30% people said they have participated whereas 50% people said they did not participate and 20% remained neutral. When asked about the confidence levels in job after introduction of AI, around 80% people said they don't feel confident and 20% said they still feel confident. Asking if their organization has invested in AI Upskilling programs, 35% people said their company has already invested, 45% denied and 20% said their company is in the planning stage whether to invest or not. Mentioning most of lower level routine task have already been automated or not, 52% people said yes 43% people said no and 5% had no idea.

**SECONDARY DATA OF JOB LOSS DUE TO AI :-**

Frey and Osborne (2013) estimate that 47% of total US employment is at risk of losing jobs to automation over the next decade. Their research reveals that a substantial share of employment in service occupations – where most US job growth has occurred over the past decades – are highly susceptible to computerisation. Bowles (2014) uses Frey and Osborne's (2013) framework to estimate that 54% of EU jobs are at risk of computerisation.

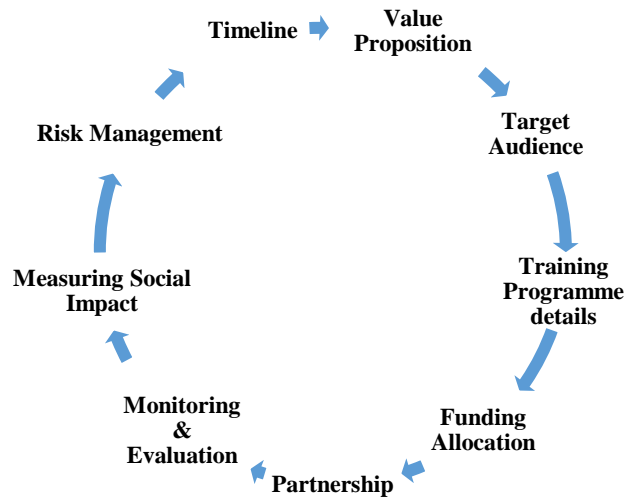
The World Economic Forum concluded in October 2020 that while AI would likely take away 85 million jobs globally by 2025

According to a research summary, as many as one billion people globally could have their jobs taken over by AI in the next decade, with 375 million jobs becoming obsolete.

The WEF (2018) Report also stated that across all industries, by 2022, the cluster of emerging professions will increase its share of employment from 16 per cent to 27 per cent, whereas the employment share of declining roles will decrease from currently 31 per cent to 21 per cent.

**SUGGESTION: -**

Model Framework to Start an In-House AI training program for Lower level management  
Model for In-house Generative AI Upskill program



Source:- Research

**1. Value Proposition:**

- Building an Inhouse AI Training Department will train the lower level management people the usage of AI in their job which will upskill them and make the employees more efficient. This will not only benefit the employees in safeguarding their jobs but will also increase the efficiency of each employ which will be a great addition in the total output and productivity of the company.
- Rationale behind making this model: AI training is indispensable in today's world due to rapid technological advancement. As automation becomes prevalent, a skilled workforce is essential to manage and collaborate with AI systems. AI training enhances efficiency, productivity, and data-driven decision-making. It provides a competitive edge, addresses ethical considerations, and fosters interdisciplinary collaboration. With the evolving job market and global connectivity, AI skills future-proof careers and contribute to innovation, creativity, and responsible AI use. Training is crucial for understanding and mitigating bias, ensuring fair and equitable AI applications. Overall, AI training is key to navigating the dynamic technological landscape and maximizing the benefits of artificial intelligence.

**2. Target Audience:**

- All the lower level management and white collar job people of the company will be the target audience. The training will follow an inclusive pattern



### 3. Training Program Details:

- Following Generic Curriculum can be followed:

#### Module 1:

- Real-world applications of AI in various industries.
- Case studies highlighting successful AI implementations.

#### Module 2:

- Overview of popular AI technologies and tools.
- Introduction to AI platforms and frameworks.

#### Module 3:

- Understanding the role of data in AI applications.
- Basics of data collection, pre-processing, and management.

#### Module 4:

- Basic concepts: supervised learning, unsupervised learning, and reinforcement learning.
- Practical examples and use cases.

#### Module 5:

- How AI can enhance decision-making processes.
- Implementing AI for data-driven decision support.

#### Module 6:

- Understanding ethical issues in AI.
- Mitigating bias in AI applications.

#### Module 7:

- Basics of project management in the context of AI initiatives.
- Planning and executing AI projects at the lower management level.

#### Module 8:

- Strategies for integrating AI into existing business processes.
- Managing change and fostering AI adoption.

#### Module 9:

- Practical exercises using AI tools and platforms.
- Project-based learning to apply AI concepts in real-world scenarios.

### 4. Funding Allocation:

- Corporate Social Responsibility (CSR) funds can be strategically allocated to support the AI training of employees, ensuring a positive impact on both the workforce and the broader community. By earmarking CSR funds for AI training initiatives, companies can invest in the professional development of their employees, preparing them for the evolving demands of the digital era. This commitment not only enhances the skills and employability of the workforce but also aligns with societal needs for a technologically adept workforce. AI training programs funded through CSR can foster inclusive growth by targeting employees across various levels, ensuring that the benefits of technological advancement are accessible to a diverse range of individuals. Furthermore, such initiatives contribute to the overall well-being of communities by empowering individuals with skills that align with contemporary job market requirements, promoting

social development and economic resilience and since CSR is compulsory in India companies can spend around 5% to 7% of their CSR allotted fund in this initiative.

#### **5. Partnerships:**

- For the start partnership with educational institutions and IT professors will be done

#### **6. Monitoring and Evaluation:**

- KPIs will be the output and efficiency of the employee before and after training will be measured

#### **7. Measuring Social Impact:**

- AI training has positive social impacts by creating employment opportunities, fostering continuous skill development, reducing the digital divide, promoting inclusive innovation, empowering communities, addressing unemployment concerns, and enhancing public services through a skilled workforce.

#### **8. Risk Management:**

- Since the funds allocated will be from the CSR Funds, risk will be minimal to none as there are no returns in profits expected from CSR. The only risk involved will be the output of trained employee

#### **9. Timeline:**

- A timeline of 3 months, 2 hours each day according to the module will be decided

#### **LIMITATION: -**

- 1) For the purpose of study data is collected only from employees, perception of company founder is ignored.
- 2) Some companies have started taking Generative AI Workshops for which the data has not been made public
- 3) Data is collected from 50 employees only due to time constraints and that too on convenient sampling bases
- 4) It is a part of initial stage of research and testing of the framework, its implication is pending. Survey need to be undertaken to understand the real implication of training model and its success.

#### **SCOPE : -**

- 1) The research can be carried out at a larger scale
- 2) The research can be carried out in detail about a particular industry

#### **CONCLUSION & FINDINGS: -**

It was found out that a majority of people thought that AI Up-skill program was required to face the challenges brought due to AI. Implementing a well-structured three-month AI training program within a company can yield substantial benefits. This duration allows employees to delve into the foundational concepts of artificial intelligence, ensuring a comprehensive understanding. Practical hands-on sessions and real-world applications during the program enable participants to develop tangible skills that are directly applicable to their roles. The program's duration allows for ongoing mentorship and support, ensuring that employees can overcome challenges and apply their newfound knowledge effectively. A three-month AI training program

not only equips employees with the skills but allow the employees to safeguard their jobs and eliminate the fear of being unemployed due to AI. It will also benefit the companies in creating human assets who can contribute to the overall benefit of the company.

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