



## Is it a threat or an opportunity to the job market?

Should we celebrate the technological advancement era or worry about it?

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### Abstract –

Today if we want to buy any goods, they are just a click away through computers and laptops. We can order them by the comfort of sitting at our home. Today, customer service calls are handled through the help of Artificial intelligence. As we face the progress of technological upgradation with the rise of Artificial intelligence, Machine learning, Internet of things, Robotics, and many other technological fields, this has created a humongous anxiety among the citizens as these technological changes will make the jobs even advanced, which will demand higher skills which many of us do not seem to have yet. There is a worry that only few of them will have good high paying jobs, affecting others or maybe working with a lower pay. Due to this threat, even the communities are being affected as with lower pay, people tend to move to even poorer community where the surroundings are not well supported. This leaves us with only few jobs, that will be highly demandable in the age of technological revolution.

**Keywords –** Technology, employment, community, jobs, skills, labor economics

### I. Introduction

An increasing worry of how technological upgradation is causing a threat to the many jobs is a cause of concern for the future. I argue that the new technologies will destroy some of the jobs, by making many workers obsolete and redundant. Artificial Intelligence, Machine learning, and Robotics have definitely made our lives and businesses work efficiently. Right from climate change to healthcare and even the labor market. These new technologies are helping us in every sector, and making the things get done smoothly, expeditiously, and precisely. However, the point I worry about is what about the people who do not seem to have the required skills to survive in the market, or have ordinary skills such as daily wage earners. It might affect them and cause them

to lose their employment, or a fall in their wages which might affect the GDP to an extent, as the unemployment rate rises.

## II. Discussion -

Let me walk you through some of the benefits to this upgradation, and also the jobs that seem to be immune to the technological advancement.

### ❖ The benefits-

Today we see AI, Robotics, and IOT solving an array of problems such as climate change, data collection for businesses, healthcare, and even education. Technology upgradation is undoubtedly helping us immensely in all the activities and making our jobs easier and faster. Today when we have to buy a smartphone, most of the people prefer buying it through online e-commerce stores such as Amazon, Flipkart, and eBay, because these stores are pretty convenient and help us save our time as well as money. Technology helps us fasten the process and complete it with efficiency. Also, as far as robots are concerned, robots will not demand holidays, or salary hikes which will help producers gain higher production efficiency. However, this causes a problem to the ordinary shops, and employees who won't get an opportunity to earn money, and ultimately that leads the businesses and their jobs to come to an end.

### ❖ The worry -

Everything has certain advantages and disadvantages. Worry is that, due to this technology upgradation, certain jobs are under threat. The following are the jobs which can be under threat due to technology advancement: -

- **Job of a house-maid-** Today we have dishwashers, and vacuum cleaners available which makes our work easier and faster so hardly anyone would be willing to employ a servant and pay him/her the required salary especially during today's pandemic situation.
- **Job of a proofreader-** Microsoft word, and Google Docs both have self-check features available where you simply select your content and get the grammatical errors as well as spelling errors corrected within few seconds.
- **Job of a courier guy -** The technology upgradation will also come up with drones being available in future. Jobs of delivery guys can be replaced by drones. Although this feature might take some time, it will definitely come in existence in the near future.
- **Market research analyst-** Many businesses run passive data collection through the help of AI and other technologies where you do not even know when your data is being collected. This might replace the jobs of market research analysts.
- **Travel agents-** Now that many people have access to laptops and computers, and smartphones, there is a worry that people will travel on their own, (many already do) due to a rise in people accessing Google Maps, and online booking systems for airlines and hotels. This might bring the travel agents' businesses under threat.

- **Restaurant Workers-** As we see a rise in people working on creating robots, we might see restaurant workers being obsolete since food can be delivered through the help of robots as they will not demand holidays, as well as work more.
- **Job of a salesperson-** The online stores have somewhat taken away the job of some salesperson, as number of people prefer buying goods through online stores than from a sales person.
- **Job of a driver-** We see many automobile companies working on driverless cars such as Tesla. When you have a driverless car, available this makes the driver obsolete and redundant.

### Other highly skilled Jobs-

- **Job of a professor-** The dropout rates from college have increased to around 8-10% as many students are moving to MOOCs online courses which are being taught by some highly qualified professors, which includes a capstone project, assignments, and online tests as well, making the program highly rigorous and knowledgeable. The recent data also shows that the students who enroll for MOOC courses actually complete it, which might leave a professor with merely publishing research articles.
- **Job of a surgeon-** An increasing number of nations have been working on creating robots which can be useful in the healthcare industry. Now on average, a surgeon takes around 5-10 years to complete his/her education and be ready to actually operate a patient. However, this job can also be done by robots in less time. These robots are undoubtedly going to be better, faster and much more efficient than the human surgeons. Hence, the job of a surgeon can also to some extent be at a risk in a few decades.
- **Job of an accountant-** We have this Microsoft excel and automatic calculations available today which makes the process faster, easier, and much more precise. A human can go wrong, during the calculation process, but the technology cannot, unless the program or the algorithm in it is wrong.

#### ❖ **The threat-**

What does the future of jobs look like? What are the skills that will become redundant in a few years?

Many of us may not have jobs, or many of us might have jobs that require skills which many of us do not have yet. Ordinary skills are definitely going to be the most affected ones. Even the car painting and spreadsheet manipulation is done through the help of computers these days. Secondly, the labor employment might fall down because of an increase in the number of computers being used in the construction site as well as other areas. So, the laborer's who do not know how to use a computer or a new machine will no longer be in use, causing the labor unemployment to rise and affect the GDP of a nation.

❖ **How will it affect the community -?**

To an extent it will also affect the community as the unemployment rises. As the workers (Middle-income jobs) become out of job, they will not have enough money which will drag them to poorer communities where other people/children are not well supported, affecting the one coming from a well-supported community. In the United States joblessness has also led to increases in divorces, and family stress. When these middle-income jobs are being lost, this leads to a loss of a decent middle-class lifestyle. Children get affected as this leads to college dropouts, and bad study performance, and also get attracted to drugs, crime, and other illegal activities, which causes them a problem during their employment.

❖ **Immune Jobs-**

So, finally what does it leave us with? What are the jobs that are immune to the technological threat? Such as AI, ML, IOT, and Robotics?

- 1) **Jobs that require high intelligence and creativity-** Of course, the jobs that require a rigorous thinking mind, and creativity such as a job of a lawyer, software engineer, economist, researcher, architect, designer, content writer, pilot, business planner.
- 2) **Jobs that require Human empathy-** Robots cannot be taught emotions and compassion. Hence, the job of a psychologist, a nurse, a therapist, or a top executive at a company, airhostess will exist.
- 3) **Job of a doorman, watchman, and waiters-** Even these jobs can be replaced by robots in a few decades, but as we see in some countries even these jobs might exist for a few decades.

As economist Alan Blinder argued, 'all impersonal services that are delivered electronically at a distance, with little or no degradation in quality, are potentially vulnerable. What will be harder to replace are human creativity, customization, and human empathy'.

### **Conclusion-**

Technology will change our lives significantly in a few years as to how businesses and we as people function, but on the other hand the threat of job losses is also a worry. We need to keep on upgrading ourselves in order to thrive in the future job market, by learning the skills that are required in a particular field to exist. In about a few years/decades many of us may not have jobs, or might have the jobs that require skills which many of them do not seem to have yet. Upskilling is a need of an hour.

### **References-**

- [1] Abhijeet Banerjee, Esther Duflo. Good economics for hard times. Player piano. One for the luddites. PP. 227-229. Mumbai. Juggernaut.
- [2] Raghuram. G. Rajan. The third pillar. The ICT revolution cometh. The effects of ICT revolution on jobs. PP. 175-176. Mumbai. Harper Collins.
- [3] Raghuram. G. Rajan. The third pillar. The ICT revolution cometh. The indirect effects of technology on jobs through trade. Allan Blinder statement. PP. 182. Mumbai. Harper Collins.
- [4] Raghuram. G. Rajan. The third pillar. Preface. Why the community has weakened. PP. 18-19. Mumbai. Harper Collins.
- [5] World Trade Organization 2017. Impact of technology on labor market outcomes. Technology and future of work. PP. 90. Switzerland. WTO.