

Radeya Global White Paper

Ensuring Job Security In The Fast Changing Employment World

Written by Kokab Rahman

Background

Technology is affecting the employment world. And it is having a tremendous effect on how people work, what types of jobs will be available to humans, and the effect on human quality of living.

It is no secret that technology is making some jobs obsolete while creating others. Since over a century, jobs involving routine tasks have been most at risk and the number of robots operating worldwide is rising quickly, states World Bank in [The Changing Nature of Work](#).

Will a time come when there are no jobs left for humans, when robots and AI take all jobs? It is too early to say for sure. Although machines have replaced workers in many tasks, traditionally technology created more jobs than it displaced. Technology brought higher labor productivity to many sectors and also “opened doors to new sectors once imagined only in the world of science fiction,” ([World Bank](#)). Nonetheless, new advancements in technology, artificial intelligence and machine learning are making bots, robots, and AI systems more advanced and capable of tasks previously unthinkable. Whole categories of low-skilled and unskilled worker jobs are being replaced by robots and machines and more complex jobs are being affected too.

“Automation and other technological advancements are creating unprecedented challenges and opportunities, and have the potential to further substitute for both routine and cognitive tasks, while at the same time increasing the need for new (technical) skills. The shift in occupational structures (e.g. the increasing gig economy) is leading to polarisation in employment, wages and inequalities...The types of jobs that are predicted to grow in the EU by 2030 are those that require higher education, social and digital skills,” states the [European Commission](#).

“Traditionally technology created more jobs than it displaced.” ~World Bank

The Latest Technological Advancements Have Changed The Game

Although previously it was thought that technology would take over routine and repetitive task jobs only while jobs requiring greater cognitive skills would be safe, Chat GPT and similar AI systems have changed that.

Advanced AI systems are affecting not only jobs requiring manual skills like labour, delivery service, and waitering and cashiering but tasks that require cognitive abilities, creativity and critical thinking, such as writing complex articles and computer code and creating designs and art. These complex tasks have been successfully done by AI in recent months. With Chat GPT-like systems, workers in customer service, freelance writing, web designing and many other industries may all be replaced by bots and AI. A study by the [Economist](#) shows that nearly half of all jobs are vulnerable to automation while more recent predictions suggest up to 80% of jobs may be at risk.

“Nearly half of all jobs are vulnerable to automation.” ~The Economist

[US Career Institute](#) states, “The jobs at low risk of automation are ones that require human qualities that a robot cannot replicate, such as social skills, emotional intelligence, and interpersonal relationships.” According to the article, these include jobs in the healthcare sector such as surgeons and therapists, first responders, personal trainers, hair dressers, reporters and journalists, civil engineers, interior designers, landscape architects, and teaching and tutoring, among many others. However, recent advances in AI and machine learning could put some of these jobs at risk as well, such as those requiring creative skills like graphic designing, creating art, and writing. Could it pose a threat to interior designers, civil engineers, and landscape architect jobs? AI has shown the capability to replicate art and writing in the style of some of the most renowned artists and writers, and efficiently handle teaching and translation work. AI is also capable of identifying a user’s preferences and carrying out tasks independently without instruction, as shown by Google’s email and photo assistant apps. At best, AI will make tasks requiring advanced creativity more efficient. At worst, AI will take over these jobs completely, providing the end user the results they are looking for with

just a computer prompt and some instructions, and bypassing the middle person (the employee) altogether.

In this fast changing world, what skills should humans have to ensure job security? This is a question that needs to be focused on. After all, from the outset, in many economies the first jobs people take will be vastly different from what we are used to. It is possible these won't be delivering newspapers, working as a fast food waiter, or being a cashier at a supermarket.

“Technology is changing the skills being rewarded in the labor market. The premium is rising for skills that cannot be replaced by robots—general cognitive skills such as critical thinking and sociobehavioral skills such as managing and recognizing emotions that enhance teamwork. Workers with these skills are more adaptable in labor markets,” writes [World Bank](#).

“The jobs at low risk of automation are ones that require human qualities that a robot cannot replicate.” ~US Career Institute

New Job Creation and the Opportunities It Offers

New jobs, sectors, and opportunities are likely to be created by the technology advancement happening currently. However, it is feared that this positive aspect of technology will not benefit everyone equally.

“Technology has the potential to improve living standards, but its effects are not manifesting themselves equally across the globe...Workers in some sectors benefit handsomely from technological progress, whereas those in others are displaced and have to retool to survive. Platform technologies create huge wealth but place it in the hands of only a few people,” writes the [World Bank report](#).

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displaced and have to retool to survive.” ~World Bank

Studies show that those who are most vulnerable are the ones to suffer most. These are people who have no recourse to upskilling opportunities and are at risk of their quality of life falling below accepted standards.

“The lack of upskilling opportunities disproportionately affects populations who are already vulnerable today, who fill many of the low-skill jobs that will soon be fully automated. Without addressing this need, we are headed towards a future of increasing inequality,” states the [World Economic Forum](#).

It is obvious that those who grow with technological advancement will benefit, while those who are left behind will suffer massively and have their quality of life deteriorate. Due to jobs being taken away by technological progress, living standards are falling across some classes, and food insecurity and homelessness is increasing. An [IMF](#) study showed that technology has caused an increase in the wealth gap. Studies show that the most hard-hit are the ones who are already more vulnerable, I.e. unskilled and low-skilled workers. “As technology-based production processes rely less and less on human labor, more and more unskilled and low-skilled workers find themselves losing their jobs, and their self-esteem as well,” writes [Inquirer.net](#).

“From the outset , in many economies, the first jobs people take will be vastly different from what we are used to.”

As the digital divide increases, some people lose massively. “Whether a person has a good quality job or not has a profound impact on their well-being. Job quality is determined by wages, stability, and working conditions, from safety to human relationships,” states [OECD](#). The big question is, will new job opportunities arise faster than job obsolescence and how can people prepare for the change to ensure their skills stay relevant?

“Digital technologies are enabling firms to automate, replacing labor with machines in production, and to innovate, expanding the number of tasks and products. The future of work will be determined by the battle between automation and innovation,” writes [World Bank](#). “In response to automation, employment in old sectors declines. In response to innovation, new sectors or tasks emerge. The overall future of employment depends on both. It also depends on the labor and skills intensity of the new sectors or tasks that emerge. These forces in turn affect wages.”

Technological advancement may open up new job opportunities. However, it is uncertain whether jobs created will be able to cover jobs destroyed. As nearly half of all jobs are at risk, that’s a lot of job losses.

Preparing for the Challenges

The employment world is entering a phase of uncertainty. Millions of people are at risk of losing jobs and becoming unemployed, unless they can take a proactive role to ensure they remain employable.

“Nearly 14% of jobs in OECD countries are likely to be automated, while another 32% are at high risk of being partially automated. Young people and those with low skills are those at highest risk - but new technological developments are now also affecting the jobs of the high-skilled too,” says [OECD](#).

New skills will be required in order for people to remain employable.

“New technologies will reshape millions of jobs in the EU and some jobs are at risk of being lost to machines. Others are being transformed and new ones are being created. As a result, the skills needed are changing,” writes [the European Commission](#).

“A big question is whether workers displaced by automation will have the required skills for new jobs created by innovation,” states [the World Bank](#).

Employees need to be aware of the changes and their effect on one’s employment worthiness. They also need to take a proactive role to counter the challenges. This means being aware of the skills that don’t risk

obsolescence as well as new job and skill requirements. It is predicted that jobs requiring a human element and sociobehavioral skills are least at risk.

The burden of keeping skills up to date with the technological changes is intense. “In the new world of work, employees need to take more responsibility for keeping their skills relevant and up to date, so that they stay relevant for the employment market,” writes [a-Connect](#).

“People will need to learn not only at school but throughout their lives,” says [OECD](#). Governments will also need to identify the risks and take a proactive role to ensure their citizens’ job security, especially those who are most vulnerable.

“People will need to learn not only at school but throughout their lives.” ~ OECD

“Identifying the skills gaps and reskilling employees is more important than the sheer size of the workforce. The Swedish Government, for example, collaborates with private companies to examine and fill skills gaps. Yet training is still biased against those who need it most, with 70–80 per cent of highly skilled workers receiving training each year, compared to only 20 per cent of low-skilled workers,” reports [a-Connect](#).

Conclusion

It is obvious technology is impacting the world and taking jobs away. This can't be denied and closing one's eyes won't make the problem go away. The important thing to do is to be informed and prepared. What jobs are most likely to be handed over to technology? What jobs and skills will be in demand from humans? What should people do to ensure the least negative impact of technology on their lives and maximum positive effect? These are questions humans need to answer on a constant basis and ensure that the steps taken by all parties involved (individuals, governments, NGOs, and Businesses) ensure a maximum number of people are in the category whose jobs and financial futures are secure.

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