

Automation and Its Effect on Society

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Abstract

The Tech world is facing a revolutionary phase. As time passes, we are being introduced to new inventions that are very beneficial for humans as they ease our work. Many inventions have made our work easier, while many inventions have eliminated jobs from our society. But still, if we compare the pros and cons of automation, we will find out that its pros are much more than its cons. Although automation has eliminated many types of jobs, it has also created millions of jobs. Only the invention of the computer has created around 18.5 million jobs around the world. Automation has created a positive impact on our society as it helps us increase our GDP. It doesn't affect net job loss in society as if it has created job loss in any part of the economy if it has also created millions of jobs in the other sector/ industry of the economy.

Introduction

People have always seen a charm in the things that make their lives easier and more automated. As time passes, technological developments are making life more easier. There is a possibility that some people might feel regret about these changes because they don't want their life to be disturbed by technological changes and they want to do their work by themselves, but the fact is that most people are feeling relieved and relaxed due to the easiness that automation has provided. In some scenarios, automation has helped to improve the quality of life of people who have disabilities (Bereiter, 1993).

As the technological world is facing a revolutionary phase, Automation has made a great impact on scientific investigation, communication, and production. *How is it interconnected with some different parts of technology, and how is technology related to our society?* These are the questions that will be taken under consideration while writing this report.

Humans are lagging far behind artificial intelligence in the jobs of marketing and sales. Sales calls can be easily analyzed through artificial intelligence. This can be done faster and more easily than humans through artificial intelligence. Nowadays, different organizations are using artificial intelligence to maintain playbooks for email marketing and to develop content strategies for marketing. Although only 3.8% of jobs have been automated till now, there are a lot of jobs that can be easily automated (Stuart, 2017). Technological advancements are happening continuously, which will provide many jobs to robots, thus creating a situation of unemployment for humans.

Discussion

Advancements in technology in the past two decades have made robots, software, and computers so sophisticated that machines are now entering the arena that was once thought to be the exclusive territory of humans, i.e., cognition. Today, computers have been made so sensitive that they can generate insights and recognize patterns used for the detection of fraud, legal research, auditing, medical diagnostics, and many others (Griffiths et al., 2005). Algorithms of artificial intelligence act much faster than humans and can process thousands of documents, free from any type of human bias.

There is no doubt that automation will increase people's standard of living, but despite its positive effects, it will also take the place of humans, and many jobs that are currently being done by humans will be replaced by robots. There is substantial confusion about the connection between technology, automation, and jobs. Here are some points that are essential to understanding this interaction (Hoff et al., 2015).

1. Automation that is driven through technology is the key to increasing the standards of our lives. This could only be done if we are using modern tools, which can only be produced by using the latest technology. Better tools will help us to produce more. If we produce more, our workers will get extra pay, and the companies will decrease the price of the products and thus, for all these reasons together, we will increase the living standards.
2. Technology can affect our productivity in two different ways. The first is when workers are replaced by technology, while the second is when there is an increase in workers' productivity due to changes in technology.
3. The impact of automation on employment differs from industry to industry. Automation leads organizations to lower their costs. In industries where lowering the price of the product does not increase the demand, automation enables fewer workers to give the same output. Whereas industries were lowering the price of products, which caused an increase in demand, automation enabled the same workers to generate more products.
4. Automation does not cause the same effects on all occupations. Some occupations have seen a serious decline in employment because technological changes have taken the place of employees. In contrast, some occupations have created a lot of jobs due to the change in technology.
5. Net job gain cannot be achieved through automation (Parasuraman, 2007). Few jobs will be generated for making new machines and tools, but their use will always cause a decline in the number of jobs. No one is going to invest in automation if the savings are less than the net present value.
6. Net job loss cannot be achieved through automation (Parasuraman, 2007). Although automation reduces jobs in some of the industries, it does not affect the overall economy. The main reason behind this is that no organization is going for automation unless it finds savings in it. If they find savings, ultimately, consumers will get the benefit of that and will use those savings in the

future to buy something else. This process will create jobs in other sections of the economy.

7. Some people say that we should only automate the 3D: dangerous, dirty, and dumb jobs. However, net prosperity always increases with the automation of good jobs. The automation of good jobs will ultimately increase the GDP; as the genuine output is still there, the workers in society have been redeployed to generate new goods so that society as a whole can acquire the benefits.
8. The rate of remunerating job creation will not surpass the rate of automation. Although there is proof that the current rate of technological development or the expected rate is high compared to the historical rate, there is still a common observation that technological changes are increasing too fast. Even if the rate of automation increases, we cannot say that there will be no simultaneous job creation. Automation will eliminate jobs in one industry, but it will not affect the economy as a whole.
9. Today, productivity benefits all workers just like it did in the past. It is not true that with the increase in productivity, workers are getting lower wages. Recent surveys have shown that wages increased with the increase in productivity, although not in an equal proportion, because income disparity has increased too much in society.
10. With technological development all over the world, people started fearing that automation would ultimately lead to joblessness. Some people gave the idea of universal basic income, according to which it would be the responsibility of the state to provide a defined amount of money to all the people, whether they are working or not. This is totally a bad idea. This will not decrease joblessness; instead, it will motivate people not to do jobs because they will get a stipend from the state while sitting at home and doing nothing.

As there are many benefits of automation, it can also cause damage to our society. A recent study shows that by the end of 2030, automation will eliminate almost 800 million jobs worldwide (Robert, 1993). Only in the US, it will eliminate 73 million jobs (Robert, 1993). However, the report also says that this technological change will not just cause destruction in the world but will also create more jobs (Robert, 1993). As in the past, changes in the tech world have not caused any harm to the entire world. The technological shifts will cause job creation, job rotation will occur, and people will have the chance to switch their jobs and opt for a new career. A particular challenge that would be faced due to automation will be income inequality. As time passes, income inequality will increase, which will lead to political instability. People who need counselling to opt for a new career would be middle-aged professionals, not young ones.

In developed markets like the US and the UK, automation will increase the financial disparity. The demand for low or middle-skill jobs will decline, whereas cognitive and creative jobs will be highly paid, thus creating income disparity in society. Although automation will bring a lot of changes, these changes won't hit everyone. If the cutting-edge technology that we have today is widely adopted, even after that, only 5% of the total current occupations will be fully automated (Riley, 1997). At the same time, 60% of the jobs will get their third activities automated. *Mckinsey's* researcher, while quoting a US official, said that "technology destroys jobs but not work. While further explaining this, he shares the data on the effect of computers on the lives of Americans since 1980 (Robert, 1993). He

says that since the invention of the computer, around 18.5 million jobs have been created.

There arises a big question: what would humans do if machines took all of their tasks? A recent study shows that technological advancements have created a lot more jobs than they have destroyed. A study shows that a rapid employment contraction trend in the manufacturing and agriculture industries has been seen, but this trend has been offset by the speedy growth in the sectors of technology, creativity, caring, and business services. There is no doubt that machines have taken many hard tasks from humans, but we have still not reached the point where machines can totally eliminate human needs. Some hard, dull, and dangerous jobs have declined due to the change in technology.

In some industries, technology has clearly eliminated jobs, but *Stewart and his colleagues* argue that those were the jobs that we really wanted to pursue. Technological development has definitely substituted human power, and while doing so, it has increased productivity and has eliminated many jobs. A recent study shows that in 1901, around 200,000 people were involved in washing clothes, but in 2011, this figure dropped to 35,000 (Hoff et al., 2015).

In some industries, including education, medicine, and professional services, technology has helped to give rise to productivity and has increased the employment rate. With the increase in technological development and the invention of the computer, many jobs have been created. Technological development has boosted jobs in many areas.

Technological changes eliminated many jobs, and they are also creating surplus jobs that are also highly paid. In addition, it is also helping many of the handicapped people in our society due to newly invented products that are being introduced in the markets. For example, the driverless car is going to be a game changer in the world. This car not only provides handicapped people with a safe means of transportation but also gives them the autonomy to go anywhere they want. This invention can further help in reducing the number of accidents. For example, if someone is too drunk after a party or falls asleep, his driverless car will take care of it.

Business people can also benefit from automation by reducing their workload and increasing their profits. The latest form of this technology is the automation of the answering system. Each of us has taken advantage of this system, but sometimes we take the fact for granted that without the help of these technologies, our lives would be much more difficult, and it would be very difficult for us to make contact with the right person at the right time.

Technological developments have decreased the prices of basic human necessities, such as food, the price of kitchens, and other household appliances. This leaves people with more money, and thus, it creates more jobs and more demand for leisure stuff. Although the traditional pub industry has shown a decline, according to the census, the number of employees in the bar industry quadrupled between 1951 and 2011 (Griffiths et al., 2005).

Although many technological developments have occurred since the last century, if it has closed the

door for one job, it has opened many other venues. Even collectors and investors have greatly benefitted from the automation process. Investors snagging collectables from online sites allow the automation process to bid on their behalf. Doing this saves time as well and helps the investor not to make any rash decisions while he is in a bidding war. This automation process also helps the investor to keep a check on the stock market by analyzing the prices of the stocks. This helps the investor either to invest in the stocks or prevents him from purchasing the stocks without remaining dependent on the stockbroker.

Conclusions

As time passes, we are facing many developments around us, one of which is technological development. The tech world is progressing so fast that it has made some threats to the human world. Although automation has made our lives so much easier, it has also affected the human race by eliminating jobs. But looking at the historical data, we come to know that automation had mostly cut down the jobs that were dumb, dry, and dangerous. Automation has not effected the net job loss in the economy as if it caused the elimination of jobs in some of the industries, it has also caused the creation of jobs in many other industries. So, automation does not have a negative impact on our society; in fact, it causes an increase in the GDP and brings prosperity to our society.

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