

Automation and Jobs

Automation involves the use of various control systems in processes such that it needs little or almost no human intervention. They are generally much faster than human labour and cost less. Labour comes with issues such as labour laws and labour unions which are of inconvenience to owners of manufacturing units and factories. Hence, manufacturing industries search for alternatives of labour in automated machines. This fuels the growth of automation.

Most famous example of automation is the car assembly line. But automation is also used bottling plants, steel plants, power generation plants, oil refineries, glass manufacturing, paper mills, etc.

Automation earlier had only displaced “blue collar” jobs. But with the advent of Technologies such as Artificial Intelligence and Machine Learning, “white collar” jobs are now at risk. These are jobs that are mostly routine. Such jobs generally need high school or college graduate level education.

A report put out in February 2016 by Citibank in partnership with the University of Oxford predicted that 47% of US jobs, 35% of UK jobs, 77% of Chinese jobs, and 57% of OECD jobs are at risk of automation[1][2]. With large percentage of people at risk of getting unemployed, it is only natural that the divide between the high income 7% and the low income 56%[3] are set to increase. What governments and organisations need to do is to incentivise and provide affordable retraining and education. Universal Basic Income where every unemployed gets a minimum income is another idea that needs to be tested.

Unemployment pushes forward populist leaders. It is to be remembered that Hitler won support in Germany when unemployment was high. In recent US elections Donald Trump got more votes where unemployment was high. Development of Automation in various sectors is inevitable. But what may be avoided is large scale unemployment.

Keywords: Automation, Artificial Intelligence, Machine Learning

[1] [The Future of Employment: How Susceptible are Jobs to Computerisation? Carl Benedikt Frey and Michael A. Osborne](#)

[2] [World Economic Forum \(Stephen Hawking: This will be the impact of automation and AI on jobs\)](#)

[3] [Pew Research:- A Global Middle Class Is More Promise than Reality](#)