



## Technological Revolution, Covid-19 & Labour Market

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This article is based on **“The Future of Work in the Post-COVID-19 World”** which was published in The Economic & Political Weekly on 31/10/2020. It talks about the impact of the fourth industrial revolution and the pandemic on the labour market.

The emergence of the ongoing **Covid-19 pandemic** has caused drastic impacts on almost every aspect of human life. One of the large uncertainties is related to the economic impact of this pandemic.

In the economic arena, the impact on the global labour market will undergo many important changes. However, the global labour market was already going through radical changes over the last few decades due to the upcoming **fourth industrial revolution** and the pandemic is likely to increase this rate.

Future prospects of the labour market are unpromising due to the advances and challenges generated by technologies related to **artificial intelligence (AI)** machine learning (ML), robotics, and industrial automation.

Therefore, the real need right now is to evaluate how the Covid-19 crisis will affect this ongoing transformation and adequate policy responses.

### Ongoing Changes in Labour Market

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- In current times, the role of technology has become self-contradictory. Even if technology has been created to support humankind, there exists an underlying fear about its impact on the labour market.
- Traditionally, changes affected only employees in charge of highly repetitive tasks, that is the so-called blue-collar workers.  
However, the recent impact of the fourth industrial revolution is also threatening those that carry out highly skilled tasks, that is, the so-called white-collar workers.
- Before the Covid-19 pandemic, the **International Labour Organization (ILO)** estimated that 1,400 million workers in the world (around 37.5% of the total workers) worked in vulnerable employment.

### Impact of 4<sup>th</sup> Industrial Revolution & Covid-19 on Labour Market

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- **Process of Automation:** According to ILO, the manufacturing sector employs approximately 1,600 million robots at a global scale, a number with exponential growth in recent years.
  - The Covid-19 pandemic will quite likely ensure that companies will strive to organise supply chains that are safe and free from viruses.
  - For this, deployments of swarm robots, that is robots linked to each other for coordinated action, present important functional benefits. Therefore, in some way, it is quite likely that Covid-19 will accelerate the process of automation.
- **Social Polarisation:** The pandemic is also increasing social inequalities due to the disparate impact of the virus on different classes.
  - However, before the pandemic, the most vulnerable jobs and with more risk to be automated were precisely the low- income ones.
  - The virus has a social impact that is quite undemocratic, which besides the ongoing robotisation and automation processes will drive up the levels of social polarisation.
- **Change in Work Culture:** The ongoing technological revolution and the impact of the novel coronavirus might radically change the work conditions.
  - With this new wave of forced remote working, some tech companies in Silicon Valley (such as Twitter, Square, or Facebook) have already decided to shift to **permanent working from home** even after the pandemic.
  - These changes will have a vast impact on the urban economies of the regions where these companies are located by affecting aspects, such as real estate, transportation, leisure, and social diversity, among others.
- **Post-Labour Society:** Some theorists predict a post-work scenario where robots would mostly replace human workforces. Among the consequences, it would mean the end of the traditional labour structure, which will require us to redefine the term work itself.
  - This can lead to the emergence of a massive and new unworking class.
  - In addition, with the pace of technological shifts, the skills required of employees will probably change faster over time, creating a group of people whose skills get constantly outdated.
- **Change in Society:** Beyond the real impact of AI and robotics on the labour market, strong changes are expected to disrupt societies.
 

Without employment providing a structure in the people's lives and with technology replacing many human activities, the societies are likely to shift towards more individualistic entities with less human interaction.

## Way Forward

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- **Positive Trends:** There are many studies which signify that the fourth Industrial revolution would create as many jobs as it eradicated, showing a slightly positive trend.
  - These studies indicate that the healthcare and educational sectors will have a growing job demand, while the manufacturing and transport sectors will suffer the largest losses of jobs.
  - Further, technology and automation could lead to a fairer economic model with lower prices, greater social awareness. Thus, there is a need for re-skilling of the workforce.

- **Necessity of Inclusive Development:** Some governments are trying to develop strategies to face the very negative scenarios that might emerge.
  - In this sense, one of such countermeasures is the **Universal Basic Income (UBI)**.
  - However, developing countries like India need to develop alternative strategies. This is because providing UBI in the world's second-largest populous country would not be feasible, especially in the near future.

## Conclusion

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It is expected that the ongoing technological revolution, besides the upcoming economic crisis due to the coronavirus, might reduce the level of regulated employment. In this scenario, the relationship between employer and employee would be reduced to a minimum.

The supporters of this policy argue that it will boost the labour market, while critics argue that the employee will be completely unprotected.



### 1st Industrial Revolution WATER & STEAM

Steam and water power replace human and animal power with machines.



### 2nd Industrial Revolution ELECTRICITY

Electricity, internal combustion engines, airplanes, telephones, cars, radio, and mass production.



### 3rd Industrial Revolution AUTOMATION

Electronics, the internet and IT used to further the automation of mass production.



### 4th Industrial Revolution CYBER-PHYSICAL SYSTEMS

Driverless cars, smart robotics, materials that are lighter and tougher, and a manufacturing process built around 3D printing.

## ***Drishti Mains Question***

Critically analyse the impact of the fourth industrial revolution and the Covid-19 pandemic on the labour market.



Watch Video At:

<https://youtu.be/scVWS-a-Qjg>

This editorial is based on **“Road bumps: On Fifteenth Finance Commission report”** which was published in The Hindu on November 11<sup>th</sup>, 2020. Now watch this on our Youtube channel.