

ONCE UPON A TIME IN AMERICA

Debates surrounding the impact of automation on jobs, are not new. With multiple cases of mainstream companies embracing and also resisting this change, experts are yet to fully determine the direction of the impact of this disruption.

A large part of the population feel that automation is not only killing their existing jobs, but also that there are limited avenues for future employment and opportunities. This belief is more commonly shared amongst low skilled workers.

Some of the most reliable jobs for people who didn't or weren't able to go to college have been in restaurants, retail or in transportation – and these are now being affected by automation. Restaurants across the United States are replacing wait-staff with tablets that make recommendations and explain the menu. An increasing number of retail stores are replacing cashiers with self-checkout options that are getting more advanced. Amazon, the online retail giant, has a chain of retail stores where customers are able to use an application to have purchases charged to their Amazon account.

Meanwhile, at an average income of \$43,590 a year, driving a truck has long been one of the most lucrative jobs for someone with a high school education. But now, automated vehicles are expected to become an industry standard. Multiple companies are already testing prototypes of self-driving trucks and are pushing for legislative reforms. Experts expect fewer accidents and better fuel efficiency due to smoother acceleration and braking than with human drivers. The self-driving trucking industry alone is poised to take over 1.7 million jobs in the next decade.

In all of these cases, automated services offer a way for businesses to save money. Not long ago, robots and automated services cost more than it would cost to pay an employee for the same job. This, however, is no longer the case. At Dynamic, a manufacturer of metal parts, a robot can perform the same job of four people for the one-time cost of \$35,000. Plus, it doesn't catch colds, need breaks or health insurance.

Another noteworthy factor is the reduction in human error. At the cell phone manufacturing company, Precision Tech, 60 robots now do what 650 employees

used to, and mistakes have dropped from 25 to 5 percent, while production has more than doubled.

In many ways, technological advances like these are inevitable and make perfect business sense. One cannot expect a company to decide not to save millions of dollars by carrying on employing people to do something that a robot can do something four times as fast, non-stop with fewer mistakes. When McDonald's announced their plan to replace cashiers with automated menus, their stocks went up immediately. It's good business.

With all said and done, without fundamental changes to mitigate risk and expand opportunities, the rise of automation and associated technologies – artificial intelligence, driverless cars, drones and robots – will have negative repercussions for low-skilled workers of the United States. These are no longer ideas for the future, they're just some of the ways in which automation is impacting the workforce today, and more developments are expected tomorrow.

Automation will cause significant labor displacement and could exacerbate a growing skill and employment gap that already exists between high-skill and low-skill workers. The accelerated adoption of automation in the coming few years will require a shift in the economical, educational and societal approaches of the United States, in order to adequately handle an evolving workforce and also protect the interests of the low-skilled workers, if it chooses to do so. Innovation and automation cannot and will not come to a standstill merely in order to meet the interests of a certain community.

Reports suggest that there is still some time before automation can completely take over and the manner in which the United States should embrace such a change is up to you.

TASK AT HAND:

As a private consultancy firm hired by the government, your task at hand is to:

- Draw a detailed human resource plan analyzing, enlisting and tackling the issues faced by a low-skill displaced workforce.
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- Devise a contingency plan to mitigate the risk of future large scale layoffs due to automation.
- Provide strategies that would sustain and promote innovation in the space of science, technology and automation within the United States.

The participants are requested to not limit themselves to the above task at hand. You may supplement your presentation with:

- A timeline of events.
- Strategies curated for certain states of key importance.
- Infographics and so on.

DELIVERABLES:

- A PowerPoint Presentation must be submitted.

