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### Automation

As the election year of 2020 is ever approaching, one of the most discussed issues in political conversations and debates is that of immigration. While this topic in it of itself is incredibly dense and could be thoroughly researched independently, it opens up awareness towards another looming issue in modern America. As discussions of immigration ensue, one of the most common argumentative points made by those who oppose immigration is that immigrants take jobs that ‘true’ American citizens deserve. Even though there may be an incredibly small fraction of job displacement caused by immigrants, they as a whole are being scapegoated for an issue that is growing on its own with no influence from the role of immigrants in this country. Job loss is a growing concern in this country, but immigrants aren’t to blame, automation is.

Technological progress is agreed upon by most economists to be “the key force behind economic growth” (Krugman 388). However, just as it is with other economic measures such as real gross domestic product per capita, in specific instances, these economic measures are not appropriate standards for quality of life. (Real GDP per capita tends to increase due to natural disasters or during wars). Despite the fact that certain technological advances in the past have actually led to the creation of jobs (such as the steam engine or cotton gin), recent advances in automation are threatening jobs at an increasing rate. While advances in technology in the past were more rudimentary and were focused on solving general issues of the time, the issue that

modern advancements in automation target is peak efficiency. Though automation does have drastic set-backs in terms of job loss, there is no one single entity that can be blamed for its existence and persistence. Businesses can't be blamed for intrinsically wanting larger margins and more reliable procedures and consumers can't be blamed for wanting better goods, more goods, and even quicker goods. However, as it has been alluded to previously, this shift towards automation which cuts down on financial costs comes at the costs of workers.

According to the McKinsey Global Institute,  $\frac{1}{3}$  of American workers will lose their job due to automation by 2030. While McKinsey acknowledges the economically positive-sounding figure of 0.8%-1.4% in productivity growth (a primary factor in economic growth) between 2015 and 2065, it is quick to state its claim that "about half of all the activities people are paid to do in the world's workforce could potentially be automated by adapting currently demonstrated technologies[, amounting] to almost \$15 trillion in wages" (mckinsey.com). The effects of automation are already drastic and it is still agreed upon by economists that these effects will only increase gradually over time. Automation is a technological advance that is purposed to get rid of the role of human labor in attempts of achieving higher efficiency, whether through robots, programming and especially artificial intelligence.

While the negative effects are essentially universally inescapable, with "almost every occupation [having] partial automation potential, as a proportion of its activities [can] be automated" (mckinsey.com), unskilled workers are set to carry the majority of the burden caused by automation. "Each new industrial robot wipes out 1.6 manufacturing jobs, the firm said, with the least-skilled regions being more affected" (bbc.com). The installment of robots in a less-skilled area leads to twice as many job losses as a similar installment of robots in

higher-skilled area, thus increasing the wealth gap that in it of itself is a growing economic issue in this country. Take trucking for an example; truck drivers represent a labor force of 3 million workers, which averages a high school level of education. Automation poses an immense risk for not only these millions of workers but entire markets that rely on the business that truck drivers bring with them. Automation can also be found in the more commonly utilized companies of retail and other forms of franchises. “McDonald’s said [that] it has agreed to acquire a company that is trying to automate the drive-thru. It’s the fast-food giant’s third tech-focused deal this year” (cnbc.com).

So, what exactly can be done about this threat of automation? Well, until fairly recently, this has not been an issue that has been given immense national attention. However, this topic has recently nudged itself into mainstream discussions by being a substantial talking point at the October Democratic debate. The leader of the movement of automation from a minor talking point to the debate stage was Andrew Yang. He began his presidential campaign in attempts to address the issues associated with automation which he claims is bringing in what he calls the fourth industrial revolution. He believes that this ‘revolution’ is a major factor that led to the Trump presidency and that automation is diverting money away from the working class towards huge corporations (he most commonly cites tech giants such as Amazon and Google) that receive the benefits of automation and are paying back relatively nothing back to the United States government or its people. Yang’s plan is to establish a universal basic income of 1000\$ for every American adult that will be paid for by a value-added tax imposed on these large corporate giants that he calls “The Freedom Dividend”.

Whether or not Yang's plan to institute a form of supply-side economics (which has proven unsuccessful in the past during the Reagan administration) actually solves the quality of life issues that automation creates, should not be the primary concern of his work. The fact that automation is simply being taken seriously in debates is cause to celebrate. More often than not, when it comes to these important national issues, politicians are acting in response instead of in advance and are trying to slow down a tidal wave as opposed to preventing its creation. Even though automation has already begun to take jobs, it is still in its relatively beginning before robot-apocalypse ensues. Unlike that of other national issues such as climate change or gun control, the United States still has the chance to stop the problems automation creates before its effects are irreversible. However, it is up to the public to ensure that the discussion of automation is kept up and more ideas/policies to help combat automation are created.

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