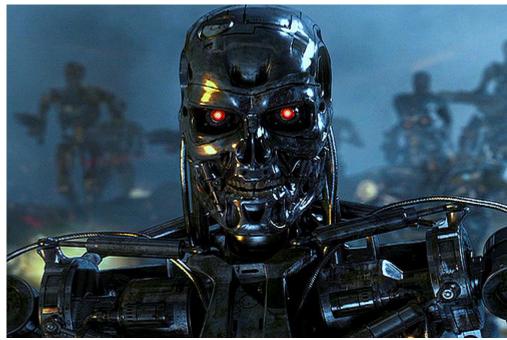
Every title is a new article. We are trying to keep them short and to the point with plenty of good data and arguments. Yellow highlight = needs to have its wording changed around for SEO reasons, if you change the wording, remove the highlight

SERIES 1 - 14 initial articles to be released by 11/24

## **SERIES 1** How the Job Automation Crisis will Play Out in America



<u>link</u>

"The next wave of economic dislocations won't come from overseas, it will come from the relentless pace of automation that makes a lot of good, middle-class jobs obsolete." - President Obama, during his farewell speech

Automation has done incredible things for humans in recent centuries. However, with each wave of technological change, societies must learn to adapt. In the present day, we are on the brink of yet another technological revolution which will be much more disruptive than any which have come before: a Fourth Industrial Revolution.

Technologists predict that in the next 5 years widespread job displacement due to automation will hit the in the United States in a big way. The widely reported automation of the transportation industry will send the first big shockwave through our country, as a massive number of people without good alternative employment options find themselves out of work. Many small rural communities will be devastated as they lose vital revenue streams from truckers passing through and will trigger a migration of people into cities with already strained job markets.

The transition of low end food service over to automated kitchens and ordering terminals will be well underway by this time, and will increase in speed due to competition between large restaurant chains who can afford to automate. Restaurants such as Caliburger are already in the process of automating their kitchens, and you may have already ordered a meal at one of McDonald's new self-service terminals. While some food service will always be performed by humans, a human chef and server will become more of a luxury than an essential mechanism in food service.

Retail will continue to shift online, and physical stores will be run by fewer and fewer humans in the years to come. This change can already be seen with the implementation of self-checkout machines and other systems which reduce the number of humans needed in a store. One example is Amazon Go, which eliminates cashiers entirely using Al and sensor technology. Like with many automated systems, often these machines require humans to keep

watch over them to make sure everything runs smoothly. There will be some jobs doing this monitoring, but not nearly as many as there were before, and as technology progresses these positions will be lost as well.

These are not the only blue-collar positions which are on the automation chopping block, but they provide a clear idea of where we're going. Even where jobs are not lost, pay will be reduced due to a larger supply of people who are desperate for work. When positions with low education requirements are eliminated, it also makes it a lot harder for people to get their foot in the door and learn. The impact on blue-collar work alone will be dramatic, and would on its own be enough to cause a national crisis.

However perhaps the most disruptive thing about this wave of automation is that it threatens not only blue-collar positions, but also jobs which involve a great deal of specialized cognitive work previously thought to be safe from technological disruption. This type of automation has the potential to progress much faster, as there is no need to invest in and implement physical devices; often it comes in the form of software.

Already, there are programs which automate certains aspects of the jobs of doctors and lawyers--some of the highest paid professions in the United States. Surgical machines will be capable of performing operations with no mistakes on no sleep. Those in the financial sector are perhaps at the most risk among white-collar workers, due to the fact that so many of the tasks they are doing will very soon be performed more efficiently by Al. Already Goldman Sachs and many of the largest hedge funds are switching to Al systems which are better than humans at foreseeing market trends and making trades.

Many people in middle-management positions will find themselves replaced by software which uses advanced AI to manage teams and evaluate productive output. An example of one program already doing this is the product of the New York startup WorkFusion. This AI-driven program not only manages teams of workers all around the world, but learns from people by watching them work, so that over time more and more tasks can be automated.

This is the future we are headed for. You might now be wondering whether your job is on the line. Regardless if this is immediately the case, we must all care about the problems faced by others in this age of dramatic change. Widespread automation will affect all of us sooner or later, whether directly or indirectly. The challenge ahead of us is tremendous, but by working together and passing the right policies in the years ahead, we can build a fantastic future in the age of automation. There are a number of potential solutions people frequently propose to mitigate technological unemployment. The next few articles in this series is dedicated to discussing each of them.

Link to Next Article >

## New Jobs will not be Enough to Mitigate Widespread Automation Unemployment



"Technology has always created more jobs than it has destroyed."

Previously, only routine physical work could be automated. In the past decade, we've developed technology that can execute even unpredictable cognitive work like driving a car or managing a project. Automation is different in today's world due to advances in machines and artificial intelligence. There will be a dwindling number of jobs that fit into the span of what humans can do better than machines. The primary thing which makes humans useful in the workplace is our brain, and now many of its functions can be emulated by machines that can efficiently replace us.

CGP Grey illustrated the <u>serious problems with the belief that job creation will counteract automation</u> in his video essay <u>Humans Need Not Apply</u>:

"Imagine a pair of horses in the early 1900s talking about technology. One worries all these new mechanical muscles [automobiles] will make horses unnecessary. The other reminds him that everything so far has made their lives easier\_ remember all that farm work? Remember running coast-to-coast delivering mail? Remember riding into battle? All terrible. These city jobs are pretty cushy\_ and with so many humans in the cities, there are more jobs for horses than ever. Even if this car thingy takes off you might say, there will be new jobs for horses we can't imagine.

... As mechanical muscles pushed horses out of the economy, mechanical minds will do the same to humans. Not immediately, not everywhere, but in large enough numbers and soon enough that it's going to be a huge problem if we are not prepared. And we are not prepared."

That's the analogy, but what does the data say? Will the rate of job growth exceed the rate of job displacement in the near future? Predictions about the future of job growth and automation answer that question with a nearly-unanimous no. According to a 2014 <u>survey of 2000 AI experts by the Pew Research Center</u>, "[a]lmost all of the respondents are <u>united on one thing: the displacement of work by robots and AI is going to continue, and accelerate, over the coming</u>

<u>decade</u>." and nearly half of them believe that by the year 2025, technology will be eliminating more jobs than it will create.

Their conclusion is echoed in the job growth and job displacement projections of the Forrester Group, who bases their insights on annual surveys of more than 675,000 consumers and business leaders around the world. Here are Forrester's 2016 predictions for 2021 and 2025:

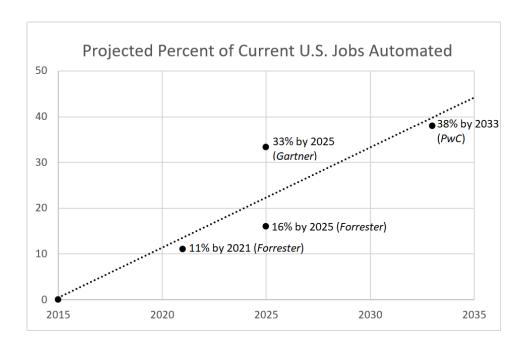
Year	Job Growth	Job Loss	Result
2021	5%	11%	-6%
2025	9%	16%	-7%

Source: Forrester

A 6% or 7% decrease in employment may not seem serious on its own, but the most significant implication is that job loss is accelerating over time. The percentage of overall jobs lost would grow each year if this trend were to continue. Forrester's projections are actually very conservative compared to many others. Gartner Inc., "the world's leading information technology research and advisory company," has predicted in their 2014 report that "Smart robots will take over a third of jobs by 2025.

The research literature predicts that almost 40% of current U.S. jobs will probably be automated away by the early 2030s. In their widely reported 2013 study, Oxford University researchers Carl Frey and Michael Osborne estimated that 47% of U.S. jobs will be highly vulnerable to automation by the early 2030s. A 2016 critical response from Melanie Arntz, Terry Gregory, and Ulrich Zierahn used data from the OECD and claimed that the real number is 9%. To resolve the dispute, Pricewaterhouse Coopers (PwC) researchers combined data from both studies with their own data and a machine learning algorithm. The PwC researchers' conclusion fell much closer to that of Frey and Osborne: 38% of U.S. jobs will be highly vulnerable to automation by the early 2030s.

Let's look at these predictions together (taking into account that the PwC projection included all of the data from the Oxford and OECD studies):



The PwC report is very cautious in weighing their projection against future job growth, saying that it is difficult to predict what kinds of new jobs will be created. Without a precise prediction for overall job growth, their report falls back on history by claiming that "historical evidence suggests that this will eventually lead to broadly similar overall rates of employment for human workers." Their own prediction about job loss makes that claim highly doubtful, since it is difficult to imagine job growth replacing 38% of current jobs in the next fifteen years.

Even ignoring that concern, PwC's appeal to history is extremely misleading because the <u>relationship between new</u> <u>technology and new jobs has changed fundamentally</u> in the past couple of decades:

"[T]he classic relationship between rising output and rising employment—known as Okun's Law—now appears to be broken. If the law, which postulates that every 3 percent gain in output should reduce the jobless rate by a percentage point, still applied, then today's nearly nine percent rate would be about one percent."

Okun's law predicts that U.S. employment and productivity should be tied together despite economic circumstances. For most of the 1900s, it made very accurate predictions. However, the turn of the century smashed it to pieces in the <u>"Great Decoupling" of productivity and employment</u>:

### Productivity and employment in the United States, 1947-2011 500 **PRODUCTIVITY** 400 300 PRIVATE **EMPLOYMENT** 200 1947=100 2000 1947 1950 1960 1970 1980 1990 2010

Sources: U.S. Department of Labor, Bureau of Labor Statistics

Since increased productivity no longer guarantees increased employment, we cannot assume that the historical trend of automation leading to new jobs will continue.

Just as mechanical muscles reduced demand for physical human labor, mechanical minds are reducing demand for cognitive human labor. Humans shifted from physical labor to mental labor back then, but there is no new qualitative kind of labor to shift to once mental labor is automated. The Industrial Revolution created as many jobs, if not more jobs, as it nullified. The automation revolution will not.

In the next few decades, technological advances will make it increasingly more practical to use a machine for any given task than to hire a human. Human workers become more expensive over time due to not only their needs for lunch breaks, sleep, paid leave, insurance, and flexible schedules, but also because of increases in the minimum

wage. In the future, it will make increasingly more sense to purchase a machine or AI rather than hire a human to complete most tasks.

While new information age companies such as Google create more value than their predecessors, they employ vastly fewer people. Kurzgesagt raised a great example of this in their video on automation: At its most successful point in 2004, Blockbuster Video employed 84,000 people and had an annual revenue of \$6 billion dollars. In 2016, Netflix had an annual revenue of \$9 billion dollars, while employing only 4,500 people. This poses a massive problem to society and its progression because these are exactly the kinds of companies which should be creating jobs - innovative new industries. Companies in tech, today's most innovative industry, are not employing in large numbers. This is different than companies such as those in the auto industry which were at the forefront of previous waves of technological innovation.

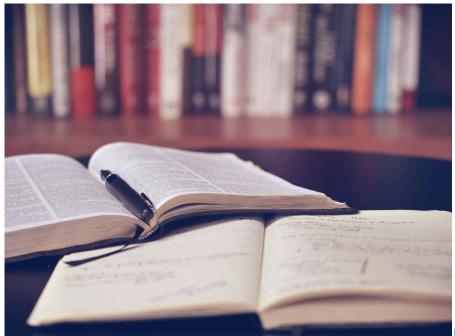
Previously if your job was automated, you could often find work at your skill level in another sector, though sometimes after a great deal of hardship. Unlike previous waves of automation, this time it's widespread across most industries, as studies predicting automation unemployment by sector have shown. Before jobs are lost entirely, wages decrease dramatically: one study found that "one more robot per thousand workers reduces the employment to population ratio by about 0.18-0.34 percentage points and wages by 0.25-0.5 percent".

Not only are the capabilities of machines increasing, their price is going down. While the cost of human labor in the US has stayed pretty much the same in recent decades, we have not becoming more capable of doing tasks which create economic value at the same rate as automated systems have. The advance of automated technology is exponential while that of humans isn't. After previous waves of automation, humans were able to catch up to machines and rejoin the workforce after a period (sometimes entire lifetimes) of displacement. This will not be the case this time. Innovation and new technology will not create enough jobs to mitigate technological unemployment.

The idea that future automation will create more jobs than it will destroy is similar to climate change denial. It keeps many from even considering policies needed to adapt to changes in our world. However once people are presented with key facts on the issue they tend to change their minds and begin to look into potential solutions to the problem, which we discuss in the articles below. Labor disruption due to automation a very serious issue our society will need to address in the coming years. Together with the right policies new technologies have the potential to lift people out of poverty and dramatically increase standards of living. The future we should be fighting for is one in which technology creates a better future for everyone.

Link to Part 2 >

## SERIES 1 Better Education Alone Will not Save Us from Automation Unemployment

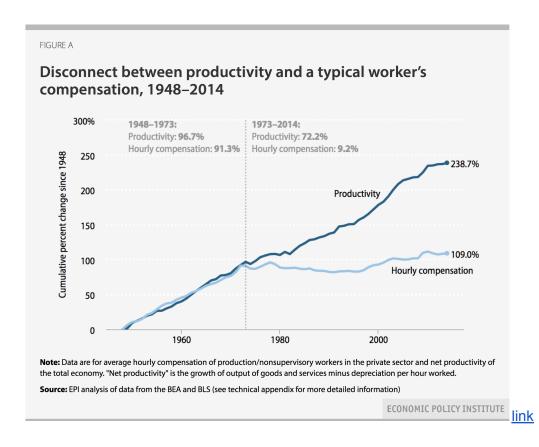


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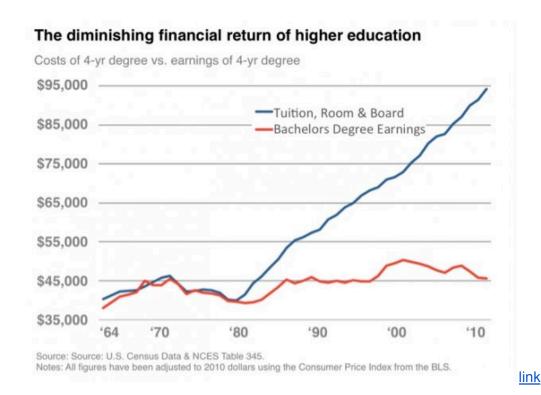
<u>Smart robots will take over a third of jobs by 2025</u> by some estimates. One common proposal is better education as a solution to the massive labor disruption automation will soon cause. It promises continued economic growth and social prosperity with no major reformative action. Quality education is essential to human progress, and should be accessible to all members of society regardless of their income. However on it's own it will not do enough to mitigate technological unemployment in the years ahead.

Everyone cannot become a programmer or any of the other limited number of occupations which will be left as automation continues to progress. Previous waves of automation and globalization have shown how flawed this idea is: the rust belt didn't transform into a booming tech sector when all the auto jobs disappeared. People have a wide range of abilities which should be celebrated. Currently there is much essential work done in our society which we do not financially reward. This includes raising kids, learning, community service, and entrepreneurship; ironically many of the things which cannot be automated.

Even if it were realistic for everyone to learn STEM skills, this still would not solve the problem. More education simply means that the skills necessary to actually create value in the information age will become less scarce. As the last 40 years have demonstrated, the value a worker creates is entirely uncoupled from their pay. So, if everyone had the skills to get STEM jobs, they might be making as much as fast food workers do today.



More widespread education raises the minimum amount of time and money people must invest in training before being able to enter the workforce and make a living wage. This is an especially significant problem for people who are poor and already disadvantaged. In the past 40 years we have seen the cost of going to college increase rapidly, while the returns grow only at a gradual pace. Many college graduates are now struggling members of the American precariat, working long hours to pay off debt and taking on unpaid internships to stand out in a job market where their degree is not worth the invested time and money.



The idea that education can sufficiently mitigate technological labor displacement is a comfortable one which appeals to people because it allows for us to carry on as usual without any fundamental change in our society. While fantastic for many other reasons, better education alone will not save us from a jobless future.

Link to Part 3 >

## SERIES 1 Job Guarantee Programs are not the Solution to Automation Unemployment



link

One proposal for mitigating technological labor displacement is workplace regulation and government employment.

A higher minimum wage has been proposed as a solution to the current low pay work environment in America today. However, in the long run it will do nothing other than speed up the rate of automation. When your job is automated, the minimum wage is zero. Additionally, as human workers become more expensive, companies will increasingly shift over to other methods of paying workers in which minimum wage is not a factor. While gig economy self employment can provide some with new opportunities, it can also be used as a tool to exploit workers.

Another common proposal is giving companies human quotas which they must meet or suffer penalties. The problem with this is that it would lead to a massive waste of human potential, as the many people would be "employed" to do pointless busy work a machine could do more efficiently, so their companies can avoid the penalties of not meeting the quota. Additionally, complex regulatory systems like this aimed at corporations always have loopholes which can be exploited, this creates a huge risk when so many people's livelihoods are on the line.

Similar to human quotas at companies is the idea that the government should employ those who cannot find work. This has the same problem that companies employing unnecessary people would: wasted human potential. It's also a darker vision of the future as it requires a large portion of the population to serve the government's interests or be unable to survive. Programs which connect displaced workers with new opportunities would be very beneficial, as long as they are not dependent on them for survival.

Regulations short of forcing companies to employ people will not be enough to keep people in the workforce due to automation. Both regulations like this and mass government employment would result in a huge waste of human potential. Workers would be doing tasks machines could do better as evidenced by them being unemployable in a traditional labor market. Widespread government employment also presents a risk to the freedom of citizens. While both could help if done right, employment requirements and government employment programs alone are not a good solution to technological unemployment.

Link to Part 4 >

# Universal Basic Income: The Solution to Automation Unemployment, Inequality, and Other Defining Issues of Our Time



<u>link</u>

Today we face automation causing widespread labor displacement, a dangerous level of wealth inequality, climate change threatening to cause massive loss of stability, political instability, and more. Though our problems are many, there is a policy solution which would help to alleviate many of these issues. **Universal basic income: a periodic cash payment to individuals which is paid out to every citizen of a country with no means test.** A livable universal basic income would, alongside programs for other essentials such as healthcare and education, solve many of the largest problems facing our society today. Here are the major benefits of this kind of universal basic income.

#### **Solving the Labor Automation Crisis**

The United States will soon be hit with a massive wave of labor displacement due to automation which we are utterly unprepared for. Studies have shown that this wave of automation will not create more jobs than it will destroy, and that labor disruption will continue to accelerate over time. Improving education will help but this alone will not be enough to mitigate the kind of widespread unemployment we will see in the years ahead. A jobs guarantee program would only taste human potential by forcing people to do work machines could do better. The only solution to this problem is a universal basic income for all citizens.

#### **Eliminating Poverty**

As Martin Luther King Jr. once said: "... the simplest approach will prove to be the most effective—the solution to poverty is to abolish it directly by a now widely discussed measure: the guaranteed income." Studies from around the world where people were given money directly have return very positive results. Poverty is a lack of capital and opportunity which spreads down through generations. We often think of poverty as this mysterious problem which is very difficult to solve, but as it turns out, it isn't. The best solution to people having a lack of capital is simply to give it to them directly, of course other programs are still needed to address certain root issues such as health problems.

### **Reducing Wealth Inequality**

The extreme inequality which exists in America today and will continue to get worse with time is one of the defining challenges of our time. It is extremely dangerous and is already eroding our democracy and putting our society at risk. Universal basic income reduces inequality drastically by directly redistributing economic gains which have been hoarded by the wealthy for decades.

#### **Increasing Social Cohesion**

One of the core reasons we are seeing Nazis march in the streets of America and on the most popular social media platforms is widespread economic disenfranchisement. History has shown when people are financially disenfranchised they can get into a mindset of there being a very limited number of resources and must be a strict hierarchy of who is most worthy to receive them (which that are always at the top of). The main objection to immigration into the united states is a fear that they will "steal our jobs", an unfounded but still widespread idea. A universal basic income would eliminate this life and death game of musical chairs, in which machines, not immigrants are removing the chairs.

### **Improving Physical and Mental Health**

Poverty presents a major health risk for those affected by it. Large scale health reform is essential in the US so that we are able to provide our poorest citizens the same level of care as other developed countries. Healthcare should not be something people even need to spend their basic income on. Instead the impact on health should be indirect. People have more time to focus on healthy habits when they are not constantly worrying about how to make ends meet. The link between poverty is well documented: <a href="those living in poverty live shorter">those living in poverty live shorter</a>, less healthy lives. Poverty actually puts enough stress on the brain to <a href="reduce scores on IQ tests by 13 points">reduce scores on IQ tests by 13 points</a>. This gap is the same as that which exists between a chronic alcoholic and a healthy adult. In the Dauphin, Manitoba basic income experiment in Canada, an 8.5% reduction in hospitalization was observed. It is hypothesized that reductions in family violence and workplace injury were what created in this change.

#### Improving Access to Education

Although programs to make higher education more accessible should exist alongside UBI, a universal basic income would drastically improve educational outcomes by allowing people to focus on learning since all their basic needs are met. In studies on basic income, people often invested their newfound free time in education. Having an educated population is vital to the future of any country, especially now as automation is about to make many jobs which require less education obsolete.

#### **Compensating People for Undervalued Labor**

In today's world we do not properly compensate people for the many kinds of work they do which benefit our society. Cleaning the home of a rich man is a job, building one for a homeless man is not. Many people such as artists, care providers, and educators are not compensated adequately for their time. In our world there is not a shortage of important work to be done, there is a shortage of people who have the time and energy left to do it after they work to meet their own basic needs.

#### **Increasing Entrepreneurship**

It is nearly impossible to start a business in today's world without a certain amount of initial capital and a solid safety net to fall back on. This is one of the main reason entrepreneurs such as Elon Musk and Mark Zuckerberg support universal basic income. We like to see America as a land of opportunity, but when you look at the data, this just isn't the case today. Upward mobility is higher in Canada than it is in the United States. A universal basic income would dramatically increase entrepreneurship by giving people the time and safety net they need to take risks and innovate. In studies on universal basic income, participants have reported having more time and financial freedom to pursue business.

### **Helping the Economy**

A recent study found the universal basic income would grow the economy by \$2.5 trillion. Currently economic growth is constrained due to the number of lower income households. In recent decades wealth has been shifting quite rapidly away from the poor and middle class, as a result those markets become less practical for businesses to target. As it turns out the economy is also a lot better off when wealth is more evenly distributed.

#### **Reducing Crime and Incarceration**

In the US we incarcerate <u>716 people for every 100,000 residents</u>, our incarceration rate is more than five times that of any other country. This costs the US over <u>\$1 trillion each year</u>, and that isn't even including what those incarcerated could be contributing to the economy. Often it is economic desperation which leads people to commit the kinds of property crimes which lead to incarceration. By giving everyone enough to meet their basic needs, you would reduce crime dramatically by eliminating the core incentive for most crimes.

#### **Empowering Workers**

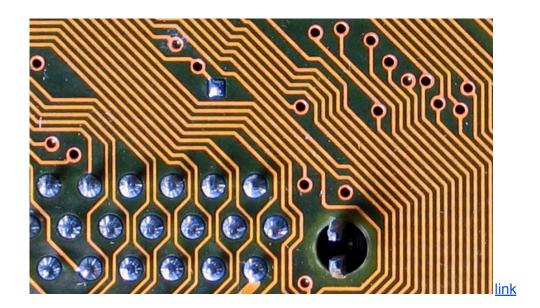
A livable universal basic income empowers workers by giving them the ability to quit their jobs at any time without having to worry about how they will survive. This removes desperation from the labor market which dramatically lowers wages and results in worker abuse. What universal basic income represents is a permanent union strike fund, true freedom for workers to make choices for themselves. This will be especially important as more and more workers are shifted over into the gig economy and are put out of work by automation.

#### **Giving Political Power to the People**

Money is unfortunately a very big part of our political process today. The more money a demographic has the easier it is for them to influence politics by donating to candidates they like. With a universal basic income we would see more political movements funded largely by small donation which better embody the will of the people. Additionally, a universal basic income gives people the freedom to participate much more actively in politics because they wouldn't need to spend all of their time and energy working a job they need just to survive.

Universal basic income is a realistic and essential policy whose time has come. It's something you'll likely hear a lot more about in the years to come. In the decades ahead our world will see dramatic change due to technology, economic shifts, and a more turbulent natural environment. How we respond to those changes and whether we decide to trust each other, work together, and build a better world is up to us.

**SERIES 1** Automation is Coming Whether You Like it or Not



It's not the consumers who choose whether automated systems are implemented, it is the service providers. If a technology is cost effective, it will be implemented whether or not all customers prefer it. Just look at automated call centers; no one likes talking to robots and pressing buttons to move from menu to menu for 5 minutes before actually reaching a human, but we are still forced to do it because it is more cost effective for the companies than hiring more people.

Companies consistently put profits before people as much as long as they can afford to get away with it. Meaningful consumer revolt which actually damages companies financially is difficult to organize and sustain. There is a reason we have government organizations to regulate the environmental impact of companies. While shopping, the average customer won't know or care about the environmental or social impact of the companies who produce the products they purchase.

However, this frustration is actually unlikely to be the case in many situations, and increasingly unlikely as automation develops. Often automation makes for faster, safer, and higher quality service. Maybe people would prefer to have a human ring up their groceries, but in the end most people still choose to go to self service because it is faster. An automated fast food terminal will never mistake on your order and a robotic surgeon will be less likely to make potentially fatal mistakes.

The world that widespread automation will create will be different in many ways, but overall it will be a better world for most people if appropriate policies such as universal basic income are passed.

### **SERIES 1** Unemployment is Low but Employment is Precarious



link

The current unemployment rate underestimates quite dramatically the lack of good job opportunities in America today. There exists a large number of "missing workers" who due to a lack of decent job opportunities, have given up looking for work. People are only counted as unemployed if they are actively seeking work, so this large number of people go uncounted. The real unemployment rate (which includes those not looking for work) in October 2017 was 7.9% according to the Bureau of Labor Statistics, that's almost double the commonly cited rate of 4.1%.

Something else which needs to be taken into account is the massive number of underemployed workers in the labor force today. These are people working low pay jobs they are overqualified for, burdened with student loans and other expenses. Automation not only causes job loss, it also lowers wages and reduces opportunity dramatically by devaluing human labor. Although we have not yet reached mass unemployment, we are already feeling the impact of automation. To be exact, wages fall 5 to 20 percent for every 40 robots per 1000 workers in a commuting area. The impact of artificial intelligence which can replace the cognitive labor of many people in white-collar positions will likely be even greater.

Right now many can still find work, but a great number of people are forced to take minimum wage jobs which were not intended to be long term employment for adults. Americans work longer than people in other developed countries for less pay. Systematic underemployment is already here as many younger people are struggling to find their place in a highly competitive workforce packed with people older than them who are also struggling to move up. In the coming years these issues will only grow worse if nothing is done.

Many people in this country have found themselves to be members of a growing class of people known as the <u>precariat</u>, a group who suffers from continued precarity due to not having economic and job security. This has a dramatic effect on their material and psychological welfare. In the coming decades the precariat will be leading the charge for economic reforms such as <u>universal basic income</u>. The time has come to stand up and demand economic justice and true freedom. Universal basic income isn't payment to do nothing, it's payment to do anything. It's an investment in our country, an investment in humanity, and an investment we can't afford not to make.

### SERIES 1 Who Would Receive a Universal Basic Income?



link

A frequently asked question regarding basic income is: who would be eligible to receive it? For Americans, the idea of this sort of massive government aid can often be hard to believe. While different plans for implementing a basic income have different specifications, the basic, core tenet of any basic income is that all citizens are eligible during their adult years. Most plans start eligibility at 18 years of age, while others call for a reduced or full basic income even earlier.

Another common question is: how much would we receive with a basic income? Again, it varies depending on the plan. Under some plans, everyone would receive the same flat amount of money, regardless of economic status. Other plans, such as negative income tax, distribute funds on a sliding scale based on income. Everyone making under the basic income threshold would receive money, and everyone over it would pay into the system- essentially, a form of tax-based wealth distribution. Either way, we at BIA advocate for a living basic income, or a basic income that pays enough that you could live off of it (in addition to essential programs, such as universal healthcare). It is our firm belief that everyone should be able to afford basics such as food and shelter, even if there are no jobs available to them.

Citizenship is a requirement for eligibility under most plans. This often raises concerns regarding immigration. If we have a universal basic income, will that increase immigration to the US? No. The USA already has a long waiting list for naturalization- that's why there are so many undocumented immigrants living here. Being a US citizen is already in huge demand. It's highly unlikely that a UBI would increase that demand significantly. Often American are unaware of just how hard it is to immigrate to the United States.

For those that do immigrate, a basic income could lead to a friendlier and more welcoming USA. The main complaint Americans have towards immigrants is that they may 'steal our jobs'. Once a basic income is in place, having a job will become less necessary to survival, so such fears should lessen. Additionally, a UBI will cause a boom in entrepreneurship, as people have the ability to invest in and pursue their goals with the support of a UBI. So, not only will there be less competition over work, there will actually be more work available overall.

## SERIES 1 Universal Basic Income is Not Enough to Prepare Us for a Jobless Future



link

Universal basic income has the power to elevate American society and alleviate a great many of the problems which have for so long plagued it. It's a policy which will be essential in the oncoming age of automation where not everyone will be capable of doing jobs which still create economic value for their employers. It's also fantastic because it can fill the holes left between other welfare programs.

However other government run programs for essential services such as healthcare and disaster relief will still be very important. We can expect that private industry will continue to exploit people in areas of essential goods as it has in this country for decades. Billionaire humanitarian Warren Buffett called healthcare is a "tapeworm" in our economy for this very reason. There is no point in everyone having a basic income if the healthcare system can bleed people dry by forcing them to pay outrageously high prices for a service they have no choice but to purchase if they wish to continue living.

In the coming years natural disasters like we saw all over the world this year will become increasingly common. There is no free market solution to disaster relief and never well be. In the wake of these events we are likely to see support for these programs increase, which is good because we will need to come together as a country to deal with the effects of climate change.

Education is another key area where public options must be made available. If our country would like to continue to see economic growth it will need to invest in in the American public again the same way it did during the High School Movement. College in America must be made free. It is the only way our country can remain competitive in a globalized world and continue to be a center of innovation and entrepreneurship.

These are just a few of the areas in which government programs will be important in the years to come. While we focus primarily on basic income advocacy, it is important not to lose sight of other essential programs.

## Universal basic income will not make rich people leave the country



link

Often when any policy is proposed which would require tax increases on America's wealthiest citizens, there is a vocal fear of capital flight. However while with major tax increases there are generally some higher profile individuals who see fit to make a dramatic departure, there is no mass migration of the rich.

As Forbes described, "researchers from Stanford University and the U.S. Treasury Department ... reviewed tax returns for all million-dollar earners in all 50 states and D.C. over 13 years" and found that "tax rates seem to have no effect at all on state-to-state migration by the rich." For example, "California's top tier income tax rate is the highest in the nation," yet it has the most billionaires and millionaires of any state in the Union. Family, friends, culture and environment keep people geographically rooted, not tax rates. If we want wealthy people to stay in America, we need a smart, educated population which is not forced to spend much of their time working long hours for little pay.

Not only is it illogical to fear rich people leaving the country if they do not get their way, but to insist that policy must be tailored heavily to the desires of a certain privileged class of citizen is undemocratic and very dangerous. The influence of big money in politics is something which must be fought, not accepted in such a way. In the age of automation we are heading into where many people will not have the ability to create economic value, this will be especially important.

### SERIES 1 Basic Income and Government Power Over the People



link

Often when universal basic income is brought up people will argue against it on the basis that it gives the government too much power over the people. However basic income gives people more control over their lives than any other government system or even private sector employment. This is due to the fact that universal basic income simply gives people money unconditionally and does not regulate how they spend it.

This is different than existing welfare systems such as SNAP, which give a poorly means tested pool of individuals credits that can be spent only on that which the government dictates. Private sector employers already have the ability to control the lives of their workers to a disturbing degree. You could get fired simply because your boss doesn't like your political stances, and in the oncoming age of automation there is every incentive for them to replace many workers with automated systems. It is better to have a democratically elected government supporting people in need than private companies who owe nothing to anyone.

Charitable efforts which have historically proven utterly insufficient to deal with large scale crisis like the one automation unemployment will create. To illustrate this: the total amount of all charitable giving in 2016 was \$390.05 billion, that's only 2.1% of GDP, and not nearly enough to fund the kind of comprehensive solution we will need in the years to come. There is no evidence to suggest that companies and wealthy individuals would donate the massive amount needed if they were taxed less.

Some argue that stronger unions alone are the solution, however automation decimates their collective bargaining power by making the labor of many people obsolete. Opposition based on government power over people is using an argument which attacks automation, and the labor displacement it will create rather than the proposed solution. There is no better system to deal with the effects of widespread automation and poverty than universal basic income. We will certainly need to guard against attempts to undermine it, but this would be the case with any such system. Thankfully, the large number of people who will benefit from a basic income will make it politically difficult to tamper with.

Universal basic income would not give the government more power over people, in fact the exact opposite would be true. This is due to the fact that a universal basic income would allow people to donate both money and time to political causes they are interested in. In the current system the wealthy hold massive influence over election outcomes through large donations, and many do not have enough time to participate in democracy because they are

so busy doing work they rely on to live. We would be far better off as a country if political power was better distributed among its citizens, this is exactly what universal basic income would do.

## SERIES 1 Why Universal Basic Income is a Victory for Workers



(upload)1

Try to imagine a labor market without a 40 hour work week or an 8 hour day. Try to imagine a labor market without a minimum wage or restrictions on child labor. The free market doesn't provide these on its own, they are mandated by government because labor markets failed catastrophically more than a century ago. Free labor markets are failing once again, on a catastrophic scale, and it is time for new reforms, chief among them a Universal Basic Income.

From the 1940s to the 1970s union membership was about a quarter of the American workforce. Union workers make on average 10-30% more than non-union workers and have better benefits and working conditions. In 1980 union membership fell below 20% and today it is lower than 11%, with government jobs making up most of that number. Due to globalization, manufacturing and industrial jobs have largely disappeared. They have largely been replaced with technology and service sector jobs.

The new job market is less stable with workers often getting less than full employment and having to work unpredictable shifts. Not only have jobs been outsourced to less regulated overseas markets but they are increasingly being lost to technological innovation and automation. While government statistics report official unemployment numbers are down and nominal wages are rising, the quality of jobs and the stability they provide has declined significantly and real wages have been stagnant for 20 years. While the cost of non-essential consumer goods has fallen with globalization, the cost of living has risen with soaring housing, education and healthcare costs.

But business is booming. Productivity is skyrocketing, the stock market is soaring, corporate profits have never been better. So where is labor's share of the economy? Why is the working class suffering so much? Why are blue collar cities dying? Because labor has lost its bargaining power. It is time for government to intervene once again, to restructure our workforce.

A Universal Basic Income would give the American workforce back the purchasing power it lost with globalization. It would stop the downward spiral that many working class communities are stuck in by adding liquidity to their households. It would give people the economic stability to ask for higher wages or to look for better jobs. A basic

income would also allow retirees, parents and students to leave the workforce and to spend more time on self care, family care and self improvement.

A Universal Basic Income would be a capital investment in America's workforce, and like the reforms that came before it, it would be a victory for workers.

## SERIES 1 Dispelling the Myth that People are Fundamentally Lazy



link

Studies on basic income have consistently shown that most people do not stop working when their basic needs are met. Often they spend more time on other beneficial activities such as caring for their communities and educating themselves.

We tend to think of work and jobs as creating short term value for people and companies who have enough capital to reward you. Cleaning the home of a rich man is a job, building a home for a homeless man generally is not. This concept of work is misguided as people do all kinds of work today which while often essential for society is not financially rewarded.

Basic income does not pay you to do nothing, it pays you to do anything. People actually tend to become quite depressed when they are unable to do work which is meaningful to them. Research has shown individuals will continuously seek new opportunities for meaningful work even with basic income. If all people wanted to do was sit around, prison would be a reward.

Additionally, money may not even be as good of a motivator as we often think. In an MIT study, students were given challenging tasks and rewarded with monetary compensation for better performance. Higher pay resulted in better performance for tasks involving mechanical skill, but the researchers were surprised to find that <a href="higher pay resulted">higher pay resulted</a> in worse performance for tasks needing mental effort. The study has been replicated in India and elsewhere, reinforcing its conclusion that <a href="people-seek-fulfillment-over-money-in-work">people-seek-fulfillment-over-money-in-work</a>:

"The best use of money as a motivator is to pay people enough to take the issue of money off the table. Pay people enough so they're not thinking about money, they're thinking about the work ... There are three factors that the science shows lead to better performance, not to mention personal satisfaction: autonomy, mastery, and purpose."

Atlassian, an Australian software company, found that giving programmers one day to work on whatever they want led to highly productive work and new ideas. Linux, Wikipedia, and Apache are driven not by economic incentive but by the desire for mastery, accomplishment, and meaningful contribution. These organizations have succeeded by applying the MIT study's lesson that "we are purpose-maximizers, not only profit-maximizers."

Basic income is an investment in humanity. Often before making an investment people will want to be convinced that what they are investing in is worth while. Humans most definitely are, however this can be easy to forget in a world where images of people at their worst are broadcast loudly on a daily basis.

## **SERIES 1** The Violence of Doing Nothing

Warning: The following video may be hard to watch and contains graphic language.



( <a href="https://www.youtube.com/watch?v=dt1oWKAa9IE">https://www.youtube.com/watch?v=dt1oWKAa9IE</a>)

Jamel Dunn struggled to keep his head above the water for several minutes as a group of teens watched and laughed at the disabled man. They recorded the entire incident including his tragic death. It would have been easy for them to save him, any of the onlookers could have. All it would have taken is one of them to have done something. You, like many people are probably pretty upset that this happened. A great many wanted the group to face charges for their lack of action, however this was difficult because they hadn't actually broken any laws by not helping him. A common problem in our society is that we tend to judge people's actions much more harshly than their lack of action.

This is especially important in the age of dramatic change we are now living in. Now more than ever it is vital that we support each other. Automation will soon render a great many people unable to find work in the current system. The world would be a very dark place if we were to turn our back on them in the same way the teens in that video turned their backs on Jamel. Widespread automation will bring dramatic change, and one of the main deciding factors of whether we sink or swim as a society will be whether we can learn to care for our fellow man.

Unfortunately, today large segments of our society, and most corporations, do not see it as their duty to support others. Three times this year Obamacare was nearly repealed, the result of this would have been more than 40,000 Americans dead each year by some estimates. A core part of modern Republican ideology on this is the social darwinist idea that only those who create enough economic value are deserving of life. That the 'useless eaters': the poor and sick, can simply be done away with. Make no mistake, the repeal effort represents an attempted genocide of the poor.

Many people have been tricked into thinking that resources in America are scarce, and for them to get something, someone else in need must lose. This is not true, we are the richest country on earth. It is extreme inequality and

exploitative industries which have created a false scarcity in our society. Ideas about the scarcity of wealth and job opportunity have long fueled all manner of hatred and continue to do so today. Politicians and organizations looking to cut taxes on the wealthy and large corporations have used these ideas for decades to push their agenda. Often subscribing to the ideology of Ayn Rand, that any form of taxation is immoral, and the expectation that people help each other as wrong.

The ideas that redistributing the abundant resources of those who have the most is wrong, and that free market exchange is the only way to determine a person's worthiness to receive essential resources are simply incompatible with a civilized post-automation society. In order to build a bright future in the decades ahead we will need to adopt a kind of humanism which views purposeful lack of vital action as a form of violence. The ideas of Ayn Rand must be viewed similarly as those of Adolf Hitler, because if they become popular enough the result is the same: genocide. In the case of Rand, a genocide of doing nothing.

When thousands are displaced due to the effects of climate change, we must care for their plight as if it were our own. When automation leaves millions without a way to make an income, we must all act as we had been put in this position. The coming age will require that we build resilience on a global scale and learn to work with each other like never before, and that's something I think we can do.



### Why Universal Basic Income is a Realistic Policy

### How Basic Income can help the economy forever

People talk a lot about UBI as a solution to automation and economic inequality. I think that it may be useful to take a look at UBI from a slightly more "neoliberal" PoV and see how it will help grow the economy, productivity, & GDP over time. I could mention a safer middle class, increased mental security, higher consumption, and a lowered dependence of public services (this is a big one that some have estimated could literally pay for *the entire cost* of UBI over a decade or so).

### \*Merit, reward and the value of work

"Pointless work for pointless pay. This is one game I shall not play!"

-A Complete History of the Soviet Union, Told Through the Eyes of a Humble Worker

Some are concerned that UBI may devalue work and delink merit from reward. However in reality, it raises the poverty floor to a point where everyone can afford the basics to live, to better themselves, and to better our country in the long run.

Work won't be devalued because of a basic income, work is devalued by a supply of desperate workers like we have now, and automated systems which replace humans all together.

People are already motivated more by fulfillment than money, so implementing a basic income would not stop someone from pursuing the work that fulfills them. Instead, basic income would allow people to pursue the work that they genuinely want instead of work that they do not want.

Another thing to take into consideration is that this idea of merit implies human value should be based on our ability to create value for people and companies willing and able to financially reward us. It entirely ignores all other forms of value people create for their communities which are not financially rewarded, and reinforces a dangerous idea that humans can be assigned worth based on a certain range of abilities.

## ★Giving People Money Directly Results in Less Drug Use Not More

One issue some are concerned with about a basic income is people spending their basic income on drugs and alcohol. But Why would someone be more likely to spend their basic income on drugs than they would a paycheck?

One should expect that basic income would actually reduce drug abuse, and experiments have demonstrated that it does exactly that. A meta-analysis of 19 studies showed that, when poor people are given money, they actually spend less on alcohol and tobacco. (let's talk more about this study,)

Also, in two separate instances, citizens had <u>improved physical and mental health after a UBI</u> program was implemented. Consider <u>two UBI programs in India</u>:

"Villages spent more on food and healthcare, children's school performance improved in 68 percent of families, time spent in school nearly tripled, personal savings tripled, and new business startups doubled."

An independent and independently funded research group called GiveDirectly has also found that <u>cash transfers do benefit the poor</u>.

There are multiple theories as to why basic income reduces substance use. Drug addiction is generally caused by social isolation and poor mental health. Multiple experiments have shown that basic income improves the physical and mental health of recipients. One thing is sure though, we should not fear substance abuse when considering implementing a universal basic income.

## Universal Basic Income would Usher in a New Entrepreneurial Golden Age

A basic income would create an explosion of entrepreneurship which would replace some of the labor demand lost from automation. Today an economic safety net and certain a amount of capital is required for people to innovate and start companies. Give that to more people and you'll have more innovation. This has been one of the primary reasons that Silicon Valley CEOs like Mark Zuckerberg, Richard Branson, Stewart Butterfield, and Elon Musk have come out in support of basic income.

### How the United States Could Pay for a Universal Basic Income

Many social programs such as social security and food stamps will not be necessary if everyone is receiving a livable basic income, so we would fund it partially with money from those programs. We will have to create new taxes, there is no way around that, but the average worker would not be impacted by them under many plans for basic income. The technology of today allows for companies to create far more value than ever before, so even when these taxes are taken into account, they will still be better off than they were using people to do everything they will be using machines for. There are many viable plans for how to fund a basic income, but in the end, it's always the machines that pay for it.

- 1. Sprinkling in points and citations wherever you can on here
- 2.Looking at the innovation won't save us article and throw some of the content from your big one in there
- 3. How would we pay for it (not our platform, a realistic example of how it could be paid for that people can link to show it can be done)

Alright, I have a <u>shareable link to the NIT spreadsheet</u>. Not sure if the format is easily understandable - I was trying to get a rough guesstimate of the cost of an NIT relative to current welfare spending.

Basically, I tried to get the number of people who make < \$20k/yr and break them into brackets, then find the cost for each bracket (as opposed to counting everyone's cost individually)

I guesstimated that a \$20k/yr NIT in the US would cost roughly \$915.5 billion. Since Social Security currently costs \$888 billion, an NIT paid for entirely by SS would give about \$19k to \$20k per year.

### Universal Basic Income Won't Cause a Labor Shortage

Studies on basic income have consistently shown that most people do not stop working when given a basic income. Those who do often pursue education, or other gainful activities. For example, consider two UBI programs in India where villages spent more on food and healthcare, children's school performance improved in 68 percent of families, time spent in school nearly tripled, personal savings tripled, and new business startups doubled. Successful experiments like these are the reason why India's chief economic advisor supports UBI.

One concern is that if you give people money they will stop working.

(Dispelling the myth that people are fundamentally lazy kinda has a lot of the same content as this one, considering waiting on it)

Additionally, the US already have a labor surplus, which is why finding a job is so hard and many have advocated for a shorter work week.

## But wouldn't the prices on basic goods such as rent go up? (another one I'm kinda worried about...)

More money in the hands of more people can cause inflation in natural resource leasing costs such as rent. Some are concerned this could reduce the benefit of a basic income for non-land-owners. However there are many ideas for how to mitigate this, including more basic assets and funding a basic income partially with a land value tax would eliminate this problem by giving the potential rent increases right back to basic income recipients.

(https://medium.com/basic-income/wouldnt-unconditional-basic-income-just-cause-massive-inflation-fe71d69f15e7 might be useful)

## What about companies leaving the country? (this one concerns me, should we not do one on it right away?)

The number of incredibly successful tech companies in California is a key indicator that companies look at a lot more than taxes when deciding which country to base themselves in. Companies moving to another country isn't as attractive as it sounds and will be increasingly unviable as our country continues to crack down on tax evasion via relocation.

Even if corporate tax flight is a serious concern, we can simply tax wealthy people instead of taxing wealthy companies - people are far less likely to leave their country based on tax rates than companies, as described above.

### Basic Income is Not Socialist/communist/whatever

No. Basic income retains the capitalist system where private parties control the means of production. What basic income represents is a way for capitalism to survive in the age of automation, this is the only free market solution to the problem we are facing. Basic income works through efficient government spending, not controlling markets. Richard Nixon was a huge advocate for basic income and almost passed it decades ago, and we can safely say he was no communist.

Basic income has nothing to do with socialism - it can work in a capitalist or a socialist system. Socialism says that the government owns the means of production, and capitalism says that private parties own them. Basic income is about how to distribute tax money, so it can work regardless of who controls the means of production.

## Why Universal Basic Income will not Cause Inflation

A basic income would be funded by taxes, not by printing more money. It is also important to understand that a certain amount of inflation is good for the economy and we have a very complex and highly effective system in place which through pulling various levers (go into detail here), controls the rate of inflation and the value of currency. So the real question is: Would a basic income overwhelm or put stress on this system? The answer is no. Until 1982 when the Alaska began giving residents a basic income via the Alaska Permanent Fund, it had a higher rate of inflation than the rest of the US. After the implementation of this wealth distribution it actually became lower.

https://medium.com/basic-income/wouldnt-unconditional-basic-income-just-cause-massive-inflation-fe71d69f15e7 and pull points from it)

As for the concerns about basic income causing inflation which this article raises, I highly suggest reading this article by Scott Santens which discusses these issues in-depth:

https://medium.com/basic-income/wouldnt-unconditional-basic-income-just-cause-massive-inflation-fe71d69f15e7

This article actually does acknowledge what it calls 'another kind of Basic Income', before quickly dismissing it as impossible, claiming that the political establishment would never allow it to happen. Well guess what? We live in a democracy, flawed as it is we still control who gets elected. To not demand essential policy because you don't think those in power would support it is not just pessimistic, it is undemocratic and dangerous. Not too long ago people said the same thing about single payer and now it's going to be hard to run as a Dem without supporting it.

One last thing about this article is that near the end it seems to assume that most workers will still have collective bargaining power in the coming decades; most will not. Automation is progressing at a relentless pace. In the coming years it will cause an unemployment crisis unlike anything we have ever seen which will get progressively worse over time, not better, due to exponential technological progress. This will cause economic dislocation far worse than that of the Great Depression if nothing is done about it. There are many reasons we should have a universal basic income, but automation is the reason we need a universal basic income.

## (?)Why Robots Will Take Your Job (moved, bits were used in other articles)

History has consistently shown that the cost for a human to perform a task rises over time, and the cost for a machine to perform a task falls over time. As long as those trends continue, it will eventually be more expensive to have a human perform any task than a machine.

The capabilities of artificial intelligence are expanding over time letting AI learn from a long list of examples and generalize them to everyday life. Using methods like these, machines and AI will increasingly learn to complete tasks which were not specifically in their programming. As long as the general competence of machines rises faster than humans' general competence, it is inevitable that a machine/AI will eventually be a better worker than a human at any given job.

Still, <u>some people think that automation is "nothing to worry about"</u> because they believe that "[c]urrent jobs will be destroyed, but many more and better jobs will be created." CGP Grey illustrated the <u>serious</u>

problems with the belief that job creation will counteract automation in his video essay <u>Humans Need Not</u> Apply:

"Imagine a pair of horses in the early 1900s talking about technology. One worries all these new mechanical muscles [automobiles] will make horses unnecessary. The other reminds him that everything so far has made their lives easier\_ remember all that farm work? Remember running coast-to-coast delivering mail? Remember riding into battle? All terrible. These city jobs are pretty cushy\_ and with so many humans in the cities, there are more jobs for horses than ever. Even if this car thingy takes off you might say, there will be new jobs for horses we can't imagine ...

But you, dear viewer from beyond 2000, know what happened\_ there are still working horses, but nothing like before ... There isn't a rule of economics that says 'better technology makes more, better jobs for horses.' It sounds shockingly dumb to even say that out loud, but swap 'horses' for 'humans' and suddenly people think it sounds about right.

As mechanical muscles pushed horses out of the economy, mechanical minds will do the same to humans. Not immediately, not everywhere, but in large enough numbers and soon enough that it's going to be a huge problem if we are not prepared. And we are not prepared."

That's the analogy, at least. What does the data say? Will the rate of job growth exceed the rate of job displacement in the near future? Predictions about the future of job growth and automation answer that question with a nearly-unanimous *no*.

According to a 2014 <u>survey of 2000 AI experts by the Pew Research Center</u>, nearly half of the experts believe that technology will remove more jobs than it creates as soon as 2025. And "[a]lmost all of the respondents are united on one thing: the displacement of work by robots and AI is going to continue, and accelerate, over the coming decade."

Their conclusion is echoed in the job growth and job displacement projections of the Forrester Group, "one of the most influential research and advisory firms in the world" whose "unique insights are grounded in annual surveys of more than 675,000 consumers and business leaders worldwide." Here are Forrester's 2016 predictions for 2021 and 2025:

Year	Job Growth	Job Loss	Result
2021	5%	11%	-6%
2025	9%	16%	-7%

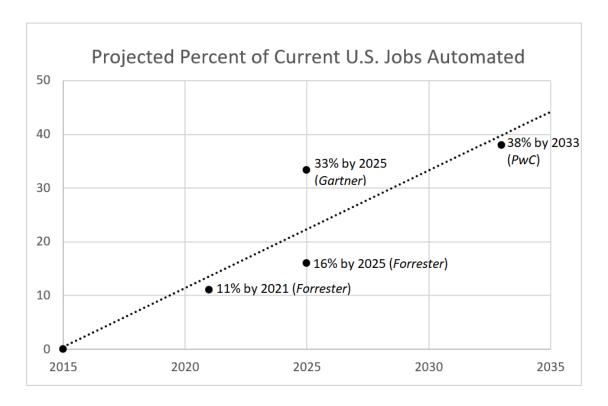
Source: Forrester

6% and 7% decreases in employment may not seem serious on their own, but their most significant implication is that job loss is *accelerating*: as time passes, the percentage of overall job loss will become greater and greater.

Forrester's projections are actually very conservative compared to many others. Gartner Inc., "the world's leading information technology research and advisory company," has predicted in their 2014 report that "Smart robots will take over a third of jobs by 2025."

The research literature predicts that almost 40% of current U.S. jobs will probably be automated away by the early 2030s. In their widely reported 2013 study, Oxford University researchers Carl Frey and Michael Osborne estimated that 47% of U.S. jobs will be highly vulnerable to automation by the early 2030s. A 2016 critical response from Melanie Arntz, Terry Gregory, and Ulrich Zierahn used data from the OECD and claimed that the real number is 9%. To resolve the dispute, Pricewaterhouse Coopers (PwC) researchers combined data from both studies with their own data and a machine learning algorithm. The PwC researchers' conclusion fell much closer to that of Frey and Osborne: 38% of U.S. jobs will be highly vulnerable to automation by the early 2030s.

Let's look at these predictions together (taking into account that the PwC projection included all of the data from the Oxford and OECD studies):



The PwC report is very cautious in weighing their projection against future job growth, saying that it is difficult to predict what kinds of new jobs will be created. Without a precise prediction for overall job growth, their report falls back on history by claiming that "historical evidence suggests that this will eventually lead to broadly similar overall rates of employment for human workers." Their own prediction about job loss makes that claim highly doubtful, since it is difficult to imagine job growth replacing 38% of current jobs in the next fifteen years.

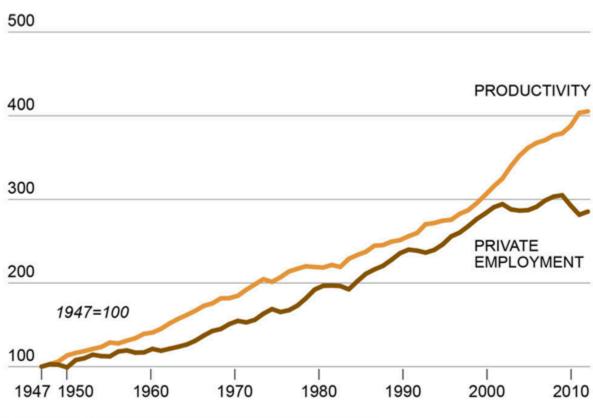
Even ignoring that concern, PwC's appeal to history is extremely misleading because the <u>relationship</u> <u>between new technology and new jobs has changed fundamentally</u> in the past couple of decades:

"[T]he classic relationship between rising output and rising employment—known as Okun's Law—now appears to be broken. If the law, which postulates that every 3 percent gain in output

should reduce the jobless rate by a percentage point, still applied, then today's nearly nine percent rate would be about one percent."

Okun's law predicts that U.S. employment and productivity should be tied together despite economic circumstances. For most of the 1900s, it made very accurate predictions. However, the turn of the century smashed it to pieces in the <u>"Great Decoupling" of productivity and employment</u>:

### Productivity and employment in the United States, 1947-2011



Sources: U.S. Department of Labor, Bureau of Labor Statistics

Since increased productivity no longer guarantees increased employment, we cannot assume that the historical trend of automation leading to new jobs will continue.

The automation revolution – or "Second Machine Age," as economist Andrew McAfee calls it – will be very different from the Industrial Revolution. "Just as mechanical muscles made human labor less in demand" due to the Industrial Revolution, "so are mechanical minds making human brain labor less in demand" due to the automation revolution. Humans shifted from physical labor to mental labor back then, but there is no new *qualitative kind* of labor to shift to once mental labor is automated. The Industrial Revolution created as many jobs, if not more jobs, as it nullified. The automation revolution will not.

In the next few decades, technological advances will make it increasingly more practical to use a machine for any given task than to hire a human. Human workers become more expensive over time due to not only their needs for lunch breaks, sleep, paid leave, insurance, and flexible schedules, but also because of increases in the minimum wage. In the future, to complete any task, a business must be increasingly irrational to hire a human instead of purchasing a machine or AI.

## #Plan

**UBI:** #ubi (8,975), #basicincome (8,817)

Regions: #usa (18,103,292), #world (1,232,321)

**Poverty:** #women (2,477,212), #money (1,976,250), #kids (719,488), #poverty (645,521), #wealth (478,750),

#inequality (279,992), #income (268,483), #children (263,175)

**Tech:** #tech (9,466,800), #iot (4,789,467), #technology (3,813,996), #innovation (623,642), #robot (534,592),

#robotics (373,542), #automation (97,746)

Work: #jobs (6,972,662), #job (6,036,875), #hiring (3,493,912), #work (1,061,496)

**Biz:** #business (18,265,050), #entrepreneur (9,463,083), #market (6,418,304), #entrepreneurs (718,467)

Education: #education (10,680,783)

Art: #art (18,881,367), #artist (5,261,129), #design (4,144,646)

News: #news (29,972,26), #trump (19,269,121), Other: #success (7,039,588), #life (2,252,742)

To the #entrepreneur and the #artist, #basicincome would

#business #UBI #tech #usa #art

Solving the Labor Automation Crisis
Eliminating poverty
Reducing Wealth Inequality
Increasing Social Cohesion
Improving Physical and Mental Health
Increasing Entrepreneurship
Improving Access to Education
Reducing Crime and Incarceration
Helping the Economy
Empowering Workers