

Robots Are Coming for Your Jobs – Are You Ready?

Humans have had a love-hate relationship with machines and technology, from the very beginning of the industrial revolution.

On one hand, we like that technology can make things easier for us but in the back of our minds, we have a fear that we can be replaced in our jobs by that same technology.

This is evidenced by the early American legends of Paul Bunyan and John Henry, which both focused on an existential struggle between man and machine.

Since that time, technology has accelerated to a break-neck pace, especially within the last 20 years.

In fact, according to a famous study, nearly half (47%) of currently existing jobs in the US are at risk of becoming automated, putting millions of people out of work and scrambling to replace their income.

Jobs in many industries across our economy are likely to be replaced by technological advancements, which includes robots, artificial intelligence and online algorithms, to name a few.

Especially at first, automation will disproportionately affect workers who are blue-collar, less educated and work in low skill occupations. Here is a breakdown of how technology is impacting the job market in various industries.

A paper researched by the National Bureau of Economic Research examined 19 industries that have introduced industrial robots and found that one robot replaced an average of six human workers.

In general, people who lost their jobs to automation in the past have been able to find new jobs, perhaps in different industries.

The transition, however, can be both uneven geographically and painful while those workers and their families suffer from a loss of income and benefits.

Financial hardship and dissatisfaction from this phenomenon have driven populist political movements and a shift in government policy in the US and countries worldwide, so workplace automation has far-reaching implications.

How Automation Benefits Companies

In addition to the savings from the salary and benefits from the employees they no longer need, companies benefit in other ways.

For example, they save on payroll taxes and unemployment taxes that they pay to the government for each employee, each pay period.

Because they have fewer employees, they may save on the amount they pay their payroll and benefits service providers each month.

Machines also do not need paid vacation, sick days or personal days so companies avoid the need to find temporary workers or pay overtime to cover employees who are not at work.

Cutting the workforce also reduces interpersonal friction and conflict both between employees and between employees and managers.

Another benefit of automation compared to human employees is that machines do not steal from the till, so theft is reduced and any costs associated with employee monitoring could possibly be reduced.

Robots excel at doing grueling, repetitive work and never get tired, unlike their human counterparts.

Shopping and Payment

Technology like bar codes, RFID chips and cashless transactions have revolutionized many shopping and payment experiences and have reduced the need for tollbooth operators and cashiers.

Cars zip through toll plazas without slowing down because payment for the toll is automatically deducted from their bank account or credit card.

Readers in the toll plaza detect the driver's car via a device attached to the windshield as they drive through.

Although there are still some tollbooth operators to service those without the auto-pay technology and give drivers directions, many of these jobs have been eliminated.

Likewise, many retailers like grocery stores and home and garden stores now have self-checkout kiosks where customers can ring up their purchases and pay without help from a store cashier.

Typically, the retailer stations one employee for the entire self-checkout area to assist customers in case some item doesn't ring up correctly or the customer is confused about how to check out their purchases.

The self-checkout area takes up physical space in the store that used to be devoted to cashier-assisted checkout lines, and fewer cashiers are needed.

Transportation

While it is not a reality for most people yet, autonomous cars are expected to be a thing by 2020.

Experts predict that by 2040, 95% of all new vehicles sold, an estimated 96.3 million cars, will be self-driving.

This is bad news for professional drivers including taxi drivers, bus drivers, limo drivers and truck drivers, who will all become obsolete.

Delivery drivers for the US Postal Service, Federal Express and UPS may find themselves on the unemployment line as they are replaced by delivery drones, already being tested by Amazon.

This same technology may even end up putting airline pilots out of work and it is expanded into airplanes.

Manufacturing

At the beginning of the 20th century, the boom in manufacturing created thousands of jobs for Americans, and with the success of the labor movement, these manual labor jobs became higher paid enabling families across the nation to join the middle class.

Automation in manufacturing started to be common in the 1970s, but technology advances in robotics, big data, machine learning, artificial intelligence and the Internet of Things (IoT) have accelerated the pace.

It is not uncommon for new manufacturing facilities to be completely or mostly roboticized, with a very low need for human workers.

When humans are needed, more and more frequently, they are working alongside collaborative robots, also called cobots.

Cobots can improve efficiency and reduce workplace hazards, a job that in the past would have required another person to do.

Telemarketers and Customer Service Representatives

If you have a phone, you have most likely been on the receiving end of a robocall.

Robocalls combine pre-recorded words with voice recognition so the automatic system can actually respond to your questions and responses.

Similar technology is used for incoming customer service calls, in combination with the nearly universally hated “phone tree,” which asks callers to narrow down the reason for their call and input identifying information by pressing numbers on their phones.

Although human reps are still used to resolve the most complex issues, simpler inquiries and problems now only require the automated system.

Construction and Manual Labor Jobs

More and more, sophisticated robots are doing the work of construction workers, warehouse workers and farm workers.

Robots can now lay bricks, select and pack products for shipment, take inventory and pick agricultural products, reducing the workforce needed in those fields.

At the moment, there are still some jobs that robots cannot do, such as jobs that involve reading people's motivations like high-level salespeople or jobs that require creative thinking or problem solving like trial lawyers and artists.

But with advances in technology, even these jobs may be in jeopardy. Your job may be next!