Robots Are Going to Eliminate These Jobs Held by Humans...

By Marisa Herman | Wednesday, 01 July 2020 10:05 AM

Advancements in technology have been transforming the workplace for decades, leading to the elimination of some jobs. But now, robots, artificial intelligence, automation and even better technology is certain to wipe out a large number of jobs currently performed by humans.

Robots can now assist doctors in complicated medical procedures and check grocery store shelves for inventory, and tech companies are moving closer to putting self-driving vehicles on the road, all of which spells bad news for some of the workforce.

“The fear of being overtaken by technology has occurred many times in the history of human development,” attorney Phil Crowley said. Crowley represents companies in the pharmaceutical, biomedical and information technology sectors that are making technological advancements by implementing the use of robots and artificial intelligence.

Using technology to help get a job done more efficiently and cheaply is accelerating but it isn’t a new concept. It is something that has been going on since the Industrial Revolution when machines began to take over the job of skilled craftsmen, he said. “It’s not that employment has lessened,” he said. “It’s that jobs have changed.”

The first jobs to be replaced by robots will be ones that involve repetitive, laborious work. But the need for humans won’t be entirely eliminated. That’s because humans will still have to oversee and control the operation of the robots taking over their jobs, he said. Over the next several decades, experts say it is more likely that humans will work alongside robots, rather than be totally replaced by them. Many experts, however, believe the use of robots will lead to fewer jobs for humans.

“There will always be a need for human beings for at least another 100 years,” Crowley said, adding robots and artificial intelligence will begin to take over some sectors in the next 30-50 years.

Industries Crowley says are likely to be disrupted by robots include heavy and general manufacturing sectors, transportation and even personal assistants. Jobs that are safe are ones that require creativity. “Dull, repetitive work will go away, but creative portions of jobs that require human intervention will not,” he said. “There will always be a demand for people who enrich the lives of other people.”

Manufacturing

Robots can be easily programmed to replace people in roles that require repetitive tasks, like manufacturing.
Crowley points to the automobile industry as “quite successful” in using robots to create a better product at a lower cost.
Robots can be found on various assembly lines, cross-checking inventory and completing tasks in warehouses.

Transportation

Truckers, taxi drivers and train conductors could all lose their jobs to robots. As companies race to create a driverless vehicle, the transportation industry is set to change drastically.
People will soon be hopping into cars that get you where you need to be without a human driver. Cargo will be tracked and delivered by robots “even better than we do it today,” Crowley said.
He predicts autonomous vehicles will impact public transportation, truckers and even the automobile insurance industry.

Personal Assistants

We can already start our cars, set our home alarm system and change the temperature on the thermostat through our cell phones.

Why not ask a robot to help with certain tasks?

Crowley said rather than have a personal assistant complete some tasks, we may be able to turn simple tasks over to a robot.
With smart homes technology and robotic vacuums already part of everyday life, Crowley said robots could soon provide personal assistance services.

“Once an idea starts, people start to improve on it,” he said. “Rather than having a personal assistant for some things, you may have a robot do some things.”

Space Exploration

It isn’t easy or cheap to get an astronaut to space or a satellite back to earth, especially if something needs to be fixed.

Head of marketing and communications for SRI International Reenita Malhotra Hora said the nonprofit recently began a space initiative with robotics company Genesis to come up with a way to use robots to help clean up debris, fix broken satellites and even build infrastructure before humans explore parts of space.

“Space is crowded, space is dirty,” she said.

Space debris poses problems to governments that rely on satellite systems for information. It is expensive to bring satellites back to earth to be cleaned or fixed. The idea is to deploy “Qbot” to space to take care of any issues.

She said the joint venture is also working on ways to use robots in space to build infrastructure that a human would need to survive the elements ahead of any space missions.

Miners

Mining is a dangerous profession. Miners face the risk of explosions, landslides and other natural disasters while looking for stones and minerals. That's is why Hora said SRI was asked to come up with a robot that could explore caves for a South American mining company. SRI worked with Enaex to produce Robominer, which has the ability to capture its environment in a mine. The robot can monitor gasses, temperature and take measurements of topography.
The goal of using Robominer is to help improve safety for miners and reach minerals that are too hard for humans to get to.

Laboratory Workers

Hora said SRI has seen an uptick in requests for robots that can complete tasks in "clean rooms."

She said pharmaceutical companies and laboratories that deal with toxic chemicals and gasses are switching to deploy robots over humans to fix things that may go wrong.

"It is expensive to introduce a person into a clean room," she said, adding it can also be dangerous.

Recently, a company that produces insulin pens reached out with a request to use robots after it "identified so many different areas where things could go wrong with human intervention," Hora said.

Hora said SRI's Taurus robot, which was originally created to assist with complex medical surgeries, has arms that can execute precise tasks like fixing a jammed rubber plunger in a lab setting.

"Robots can do that with really great precision," she said.