

IN YOUR NEIGHBORHOOD

A major disruption in the workforce: robots and jobs

We need to develop a better way to talk about how robots in the workplace will disrupt job creation



PHOTO COURTESY OF FACEBOOK PAGE FROM MR. ROBOT

An image promoting the second season of "Mr. Robot," an original series produced by AMC.

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WHY IS THIS STORY IMPORTANT?

The growing use of robots in the workplace is disrupting the economic forces of job creation, but we – and our political leaders – have yet to figure out how to talk about the coming changes in economic strategies and policies.

NEW YORK – For the Presidential candidates, promises about jobs, job creation and saving the middle class, are staples. In just the last couple of weeks, Donald Trump was in Pittsburgh, decrying international trade agreements, and promising to bring steel manufacture and jobs back to the region. Hillary Clinton talks about government-sponsored infrastructure jobs and encouraging small business.

But quite apart from trade agreements, greed, Wall Street-oriented investments and the rest, a closer look may show that the talk is running in the opposite

THE QUESTIONS THAT NEED TO BE ASKED

What kinds of robotics are being introduced in Rhode Island that will displace human workers? Is the R.I. Department of Labor and Training tracking this data? Is there a way to channel resources into workforce training to address job displacement from robotics? Does the R.I. General Assembly have any way to discuss the potential workforce disruption by robotics? Will any of the Presidential candidates discuss robotics as a future economic policy question?

UNDER THE RADAR SCREEN

The anthropomorphic device of giving robots human qualities and learning capabilities is a popular device in science fiction movies, from 2001 to Star Wars, from The Matrix to the current series, Mr. Robot, projecting intense human emotional drama onto robotic creations. How we experience robots in the workplace is often just the opposite – they often seek to provide interactions that are free of human drama, interaction and emotion. Interactions with other humans are messy; robots provide the illusion of error-free service [although anyone who has done battle with a robotic consumer answering service may want to challenge that assumption]. How we talk to each other, engage in face-to-face conversations and interactions, and use all of our senses, is still an important part of our lives, to be both a participant and an observer.

direction from a singular force in labor and workplaces – robots.

Just hear the name “robot,” and our interest lights up with futuristic visions of humanoid Star Wars beings, full of dexterity and loyalty, serving our every household and industrial need.

As we can see almost weekly, that future is not-so-slowly, technically becoming real, as technology companies move on from automation and “time-saving” devices to tackle a wider, more bewildering set of routine tasks, starting first with issues where safety is concerned, but moving on to envision Jetsons-like household help and new industrial processes.

We are used to talk now about robotic bomb detection equipment, experimentation with driverless cars and drone delivery. Who could argue with safe taming of explosives or even fewer auto accidents or instant service from a smart machine that, we are told, can probably actually “learn,” at least by encoding memorized experience. [The use of a robot device to kill the suspect in the Dallas police ambush is a case in point.]

The promise of disruption

Whatever misgivings we may detect seem relatively benign in the face of advancements that may be possible in medicine, transportation, safety, the military, even education. The promise is that advances to be had in economic productivity and product quality will be unheralded.

It is all so a part of “progress” that widespread acceptance of robots in our society has yet to even form as a question in wider social circles, like the Presidential election, where we endure competing promise after promise of new, wide and deep job creation.

Yet, if you look, industry, technology, economy and academic experts who are asked seem to agree: robots will become a huge disruptive on the U.S. and global economies, replacing millions of workers, probably within the lifetime of the next two-term presidency. Political promises about job development notwithstanding, we actually should be preparing for a massive loss of human employment.

A San Francisco hospital has deployed robots for delivery of patient meals and medications, replacing humans.

The head of the McDonalds fast-food chain told a restaurant association meeting last month that rising minimum wages are accelerating plans for 25,000 robot-run restaurants globally; there are more than 50,000 fast-food workers in New York City alone, 10,000 in Rhode Island.

Citibank expects a 30 percent reduction in bank branch tellers as a result of machinery. The Associated Press has started using robots to produce stories about minor league games.

Robots and job loss

A robotics association newsletter outlined how driverless vehicles may mean fewer accidents, but that also will change not only the trucking industry, but rippling effects to auto repair, auto parts, short-term motels, roadside fast-food places and the like.

Indeed, the World Economic Forum issued warnings this spring about global employment, forecasting that more than five million people will lose jobs across 15 developed economies by 2020 as a direct result of robotics and automation technology.

That estimate is likely low, because it does not take into account the rippling effects that will occur, just as the reduction of agriculture or the start of an Information Age did. This new technology push will raise questions throughout our society.

Robotics is different than automation, which automates certain functions but still leaves operations in human hands. Robots actually displace people, as has long been seen in auto factories and other industrial settings. Arrival into service industries will raise a new set of issues. In particular, robots will at first displace workers at lower pay grades, but gradually move through the entire economy.

The University of California, San Francisco's Mission Bay wing opened last year with robots in place to deliver food and medications to bedsides, and with robots in place to fill pharmacy orders. In both cases, administrators said humans were not displaced, but only because the hospital is growing and adding jobs. The robots are always on time and make no errors.

Even with expected new jobs to build robots [until robots take over the task], it is the sheer scale of disruption that should prompt thought.

Far from being anti-robot, the question is what can or should we be doing, knowing that these forms of progress are coming. There is a lot that we should be considering in public policy, conservative or liberal thinking notwithstanding. What is the role of education in a disrupted economy – or unemployment programs, or the role of government and industry?

Here's a modest proposal: For companies who claim depreciation for capital investment in new automation and robotics that displace workers, perhaps some investment must be made in additional job training for displaced employees. Robots will aim first at jobs that are repetitive, routine, easily definable – jobs that are open first to the least educated, the poorest, the most at-risk in our population.

But white-collar jobs will not be saved from robotization either, including news articles, which even today are being generated by computer [not this one.]

For the moment, this is an issue akin to how we discuss trade policy. Candidates say they are for or against, not how best to cope with the issues that arise without regard to the final outcome of a policy debate. When they discuss jobs, they talk about tax incentives for investment, not the elimination of whole classes of work.