How to beat the robots

By Claire Cain Miller March 7, 2017 – The New York Times

Maybe the automation of jobs will eventually create new, better jobs. Maybe it will put us all out of work. But as we argue about this, work is changing.

Today's jobs — white collar, blue collar or no collar — require more education and interpersonal skills than those in the past. And many of the people whose jobs have already been automated can't find new ones. Technology leads to economic growth, but the benefits aren't being parceled out equally. Policy makers have the challenge of helping workers share the gains.

That will take at least some government effort, just as it did when the United States moved from an agricultural economy to an industrial one, with policies like high school for all or workers' rights.

Whether there's political will for big changes remains to be seen, but here are some policies that economists and policy experts think could help now.

More Education, and Different Kinds

A broad area of agreement: People need to learn new skills to work in the new economy. "The best response is to increase the skills of the labor force," said Gregory Mankiw, an economist at Harvard.

The most valuable thing could be to increase college enrollment and graduation rates. A growing number of jobs require a degree; the unemployment rate among people 25 to 34 with college degrees is just 2 percent, versus 8 percent for those who stopped their education after high school.

But that goal seems far-fetched at a time when only about one-third of Americans have bachelor's degrees. For many more who lack the time, money or drive, what's already happening is more vocational training, at community colleges or through apprenticeships. This provides a way for people to learn on the job, but the problem is that many of those jobs are probably next in line to be automated.

People who lose their job midcareer don't necessarily have the skills to do another one. But government retraining programs are confusing and often ineffective, and many companies aren't willing to invest in training workers only to have them poached by a rival. "It's bipartisan judgment that it doesn't work," said Tyler Cowen, an economist at George Mason University. "People are not that malleable."

More successful, he said, is training that workers seek themselves. One idea from Third Way, a policy think tank, is free online prep courses for people who have been out of school too long to remember high school basics. Andrew McAfee and Erik Brynjolfsson, founders of M.I.T.'s Initiative on the Digital Economy, suggest federally guaranteed student loans for nontraditional programs like online certificates or coding boot camps.

Perhaps most effective is reaching students as early as elementary school. Educators should focus on teaching technical skills, like coding and statistics, and skills that still give humans an edge over machines, like creativity and collaboration, experts say. And since no one knows which jobs will be automated later, it may be most important to learn flexibility and how to learn new things.

Create New and Better Jobs

The problem, at least for now, is not that there isn't enough work — there is, but it is very different from the kind of work technology is displacing. Manufacturing and warehousing jobs are shrinking, while jobs that provide services (health care, child care, elder care, education, food) are growing. "We are far from the end of work, but face a big challenge redeploying people toward addressing our society's very real needs," Mr. Brynjolfsson said.

One idea is for the government to subsidize private employment or even volunteer jobs. "If the private market isn't creating the jobs people need, then the public sector should engage in direct job creation," said Jared Bernstein, senior fellow at the Center on Budget and Policy Priorities, who was chief economist for Vice President Joe Biden. He said the technique "has a better track record than people think." A recent study by the Georgetown Center on Poverty and Inequality examined 40 programs over 40 years, and found they were successful at things like improving workers' skills and reducing their dependence on public benefits.

President Trump and many others have proposed putting people to work building and repairing bridges, roads and other infrastructure. He has said he wants to do it in part by offering tax credits to private companies.

Construction jobs are being automated, though, and not everyone has the skills to do advanced building. A less discussed option is make-work, like government-funded jobs gardening in parks or reading to older people.

More people would do caregiving jobs if they paid better, said Lawrence Katz, a Harvard labor economist: "Nothing says home health aide has to be a minimum wage job." That seems unlikely anytime soon, especially without strengthening labor unions.

Economists largely agree that manufacturing jobs aren't coming back, but the United States could slow the losses by attracting more advanced manufacturing, especially in green energy, Mr. Bernstein said. "Some smart country is going to dominate the market for battery storage, for example," he said. "That should be us." People who lose their jobs often don't have the money to pick up and move to where jobs and training are, so he suggests the government help people move. But it's not just about money — many people don't want to upend their lives.

Bolster the Safety Net

There seems to be bipartisan support for expanding the earned-income tax credit, which rewards low-income people for working.

Much more fanciful, at least in the United States, is a universal basic income, in which the government gives everyone a guaranteed amount of money. But that idea is gaining with thinkers across the ideological spectrum. Critics say it would discourage people from working; proponents say it would free them to go back to school or to do work they're passionate about.

"The key response must initially be to expand the earned-income tax credit and then ultimately have a universal basic income ensuring at least subsistence," said Robert Reich, public policy professor at the University of California, Berkeley, who was labor secretary under President Clinton.

More realistically, the Obama administration proposed wage insurance to make up the difference for people who move to lowerpaying jobs. For instance, machinists, in a shrinking occupation, earn a median hourly wage of \$19.50, while home health care aides, in a growing occupation, earn \$10.50.

Change the Way Work Is Done

Most people have skills to earn money, so why not make it easier to do so without an employer? Freelance and contract workers could get portable benefits. They wouldn't have to be tied to a job to get health insurance, for example, (though the drama over health care makes the expansion of other benefits seem unlikely). Similar and more feasible ideas include easing regulations for companies to hire contract workers (which is happening more, though not necessarily to the benefit of workers), and building co-working spaces so that people get the camaraderie of an office.

Governments could also make it easier to start small businesses. Third Way proposes borrowing an idea from Silicon Valley and creating venture capital funds, seeded by the federal government, for states to invest in local entrepreneurs. "People in the rest of the country have good jobs-producing ideas, too," said Jim Kessler, senior vice president for policy at Third Way.

There's bipartisan support for a policy that would surely help: reducing licensing requirements for many kinds of work. Thirty percent of jobs in the United States require some sort of license, according to one estimate. Sometimes it's for safety reasons, as with doctors or electricians. But in some places, hair shampooers, makeup artists and florists need licenses.

Machines may take so many jobs that there aren't enough left for humans. That would suggest policies like cutting hours instead of employees. The United States has had a 40hour workweek only since 1940. Why not shorten the workweek to three or four days, or institute job sharing, which has been successful in Germany? "That's the realm of science fiction," Mr. Cowen said. "It's not an America we would recognize."

Give Workers More of the Profits

The earnings from automation have been shared unequally, with business owners getting a much larger share than workers.

"Technology creates phenomenal wealth but concentrates it beyond any acceptable level, and so we will have to agree on some sort of redistribution," said Sam Altman, president of Y Combinator, a tech start-up incubator. But there's no agreement on how to solve the problem.

Liberals want to raise the minimum wage, while many conservatives want to keep it low so that human labor is less expensive than robot labor. Third Way proposes a minimum wage that varies with the cost of living — \$9.35 in Killeen, Tex.; \$11 in Scranton, Pa.; and \$12.60 in San Francisco.

Bill Gates recently suggested taxing robots (in other words, taxing companies that own robots). One camp suggests raising corporate taxes while lowering income taxes for workers, but another proposes cutting or eliminating the corporate income tax and raising personal income tax rates instead.

The government could create a minimum pension, which would require employers to contribute 50 cents per hour worked into a private retirement fund. Then again, employers might just lower wages to finance it.

"How to make the forces of technology and globalization work for people and not against them is the biggest public policy challenge in America," Mr. Kessler said. "The rise of populism, both on the left and the right, is because middle-income voters feel that their elected leaders don't have the answer to this question."