## The Jobs for the Young - Going, Going - Gone!

The obsolete people problem and good jobs vanishing in America is coming to a head ... and will hit millennials squarely in the face!

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I just came across a very interesting article on the internet, that says all that I've been trying to tell people, that soon times for the millennials and Z-Generation are going to be turning very hard, that will make our present job market look like a girl scout camp out. Titled, "MOVE OVER, HUMANS . . . Silicon Valley is right—our jobs are already disappearing", by Andrew

Yang, Founder and CEO, Venture for America, spells out the hard, cold, cruel facts of life about technology displacement and jobs for younger



Americans. And it isn't at all pretty! Technology displacement is far from new, indeed for my first job (1977) I witnessed the introduction of three major technologies that would ultimately cut great swaths through the American work force. As the years have progressed, I've only seen more job fields disappear at an ever faster rate, which isn't surprisingly since technology doubles ever fifteen years. So it stands to reason that if technology is growing exponentially, then automation and job displacement should also increase exponentially . . . which it is!

Automation certainly isn't something new. In the late nineteenth century, as America was industrializing, she faced sever labor shortages for all those bustling new factories producing the modern world. This problem was addressed via two different means. The first and foremost known to all, was to throw open our doors to emigration, encouraging millions to leave their homeland and move to America, the land of opportunity because there was all those jobs needing to be filled. And they did! The other much lesser known, but still very effective method, was developing control systems so those factories could operate machines without human workers. And America excelled at automatic control systems, becoming premier at the new technology, while displacing countless jobs, but with so many jobs to be filled, no one notice this revolution growing and encroaching into our world. Nevertheless, machines were needing fewer and fewer of those expensive and troublesome humans. But it didn't stop when manufacturing started its decline in the 1960's, indeed it bolted ahead at lighting speed with the advent of plentiful cheap computers.

The technology of automatic feedback control systems has reach a point of fully automated robots able to see for themselves, to make their own decisions, to do a job without the troublesome human. We've reached the point where there are now robots driving cars amongst us on public highways, news stories portraying driver-less cars whizzing down the freeway, the 'drivers' busy with anything but driving as they gleefully and carefree go to their destinations. But with these systems costing several times more than the car, the target market is obviously elsewhere— the people who get paid to drive, who make their living driving such as truck

drivers, cabbies, mailman, bus drivers and delivery people. Estimates are that two to three million driver based jobs will disappear. And this self driving technology has rocketed forward far faster than anyone, including this technologist, ever thought possible.

There is a report, you can down load a pdf copy from the internet, of a research project recently conducted to determine how many jobs will be loss to automation, principally from computers. (Google: 'Osborne, report, pdf ') The Osborne report took over 700 career/job fields and made estimates for each of how much impact computer technology will likely have in the next twenty years. Their conclusion is that as much as 47% of the western jobs will disappear in the next twenty twenty years. When political activist started advocating \$15 per hour wages for fast food restaurants, they unknowingly set in motion a rush to find new technologies to replace those potentially more expensive humans. You've seen one example with the 'make and pay' for you order via smart phones. But behind the counter there are other technology attempts to automate, such as kiosks to automatically make pizzas, hamburgers and tacos. The net result is fewer people will see that \$15 per hour because they won't have a job to see it with.

And it's not just the lowly hourly paying jobs disappearing. If you will recall, after the 2008 financial/economic crash, there were numerous news stories of six figure middle level corporate executives who were laid off, and where they could once get a new job in days or weeks, they had gone months, then years without anything. Why? Because those corporations were able to reorganize themselves around computer and telecommunications systems to reduce their management staff. School teachers are another career field about to be wiped out. The technologies for doing ATS (Automated Teaching Systems) is already here. When the marketing model of cable and satellite TV systems is applied to ATS, the new technology will sweep the teachers away before our very eyes. When a sales representative can go to the school board and tell them "Clear all your classrooms out of everything, and we will install our integrated work station with a computer, wire the computers into a local network with local servers that connect to the internet", the teachers will quickly start disappearing. They'll tell them, "So where you are now paying \$750 per student, per course, per semester, we will charge you \$350, and you won't have to pay one red cent for installation", and the rush will be on. With so many cash strapped school systems desperate to save money, ATS will grow like wildfire.

I just heard an interesting statistic on the news, that the number of young people still living with their parents is now 32%, up from 26%. This is because so many young Americans are unable to find jobs where they can support themselves in the  $21^{st}$  century. Worst, there's every indication that this will only get worst... possibly much worst. So the questions is, what's to become of this surplus of obsolete people?

Unfortunately, there is already a well established answer.

The historic solution for people too backwards, primitive and underdeveloped to be of any value in a high technology society is reservations . . . and genocide. What happened to the Indians, the Native Americans, wasn't the racial atrocity portrayed in popular history, rather it's what's happened before them and then after, and continues to this day with the Palestine problem. Indeed, with our social safety net, we may have already created that reservation. Trouble is, it's not energy - resource efficient.

So for many of the millennials and Z-generation, jobs for them are Going, Going - Gone!

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