

Where the Boys Are - or Were!

As the millennials and Generation-Z are displaced by machines and technology, where do they go?

James Lyman B.S.A.E., B.S.E.E., M.S.S.M.

www.economicandfinancereport.com

I don't know why, but in reading and thinking about jobs being replaced by machines and automation, I think of the 1960 beach party movie 'Where the Boys Are' or rather the title alluding to where are the people who lose their jobs to technology. Where do they go? Today, jobs are lost before young people even start looking, leaving them with few options and lower pay. In the daily news, I see story after story of new emerging technologies which will further reduce the available jobs, leaving more of the millennials and generation-Z with a lesser future.



I made a brief list of emerging technologies, now in the news, which will displace people and their jobs, technologies designed explicitly to eliminate the cost of labor and therefore people's jobs while others will inadvertently take jobs away. Already, there is a long list of jobs taken by machines and technologies such as machinist, factory workers, construction trades, secretaries and clerk typist. Here's just a few-

Cashiers: For several years now the big box stores have worked on systems to total up the purchases of a customer, collect their monies and send them on their way without any human required. Every major brand name retailer now has a section of automated checkout lines where the customer scans each item, drops it in a bag and makes payment to a machine. To remain competitive, retailers are looking for anything that will reduce their labor cost, and the cost of human cashiers is significant. Automatic checkout is now to the point where a customer only has to walk out the door and he's purchases are automatically made when passing through a portal.

Truck Drivers: No doubt, you have seen more than one news article about self-driving or robot automobiles which drive themselves through traffic while the driver just sits and enjoys the scenery. But the declared target market for this technology isn't the individual car commuter, it's the truck drivers, both delivery and long haul. That's where the money is. And it's not that far away, with UPS, the U.S. Postal Service, and some retail stores actively experimenting with robot trucks. Just recently, the postal service had a robot semi-truck make daily deliveries of mail from Arizona to Houston Texas via I-10, to evaluate their feasibility. There's lots of money to be saved by eliminating truck drivers, both from their pay and reduced accidents since the vast majority of truck accidents are 'driver error'.

School Teachers: The cost for school teachers, both in public and private schools, consumes

tremendous amounts of dollars. With school boards continually strapped for monies and high taxes, and the quality of American education closer to third world nations instead of the west, there's big incentives for school systems to seek cheaper improvements. The technology for ATS (Automated Teaching Systems) is already here, where pupils would have individual tutors geared towards their academic needs. When an education company adopts the marketing model of cable and satellite television to ATS, the technology will sweep through schools and eliminate teachers. When the company fills the classroom with it's own custom built furniture and computer network, but the school doesn't pay one red cent, when the cost of educating a student is two-thirds to one-half the cost of a conventional teacher, the technology will flood into the American schools and classrooms. An instant revolution in education!

Airline Pilots: Even very highly skill professionals such as the pilots who fly the airliners you travel in, are subject to displacement by machines. Boeing Aircraft has already announced they are working on pilotless airliner designs, but keep in mind that when automatic elevators were first introduced, many people refused to ride on any elevator without a human operator. However, as automatic elevators became more prevalent, more people rode machines controlled by machines. Like automatic elevators, pilotless airliners will come to be accepted, after all- more than 95% of airline crashes are from pilot error. Automatic landing systems were developed in the late 1960's and have been used to land the Space Shuttle. Today, for most of the flying time, the airline pilots just sit in their seats as computers fly the airplane for them.

Retail Workers: This is a job field that has already seen massive displacement of workers over the decades. Nevertheless, companies are experimenting with robots to stock their shelves, clean the floors, check inventory and other tasks that are now being done by humans. The online retailers have gone even further using automated warehouse technologies to eliminate even more human workers, making their operations much cheaper than traditional brick-and-mortar stores with all their expensive retail workers.

Lawyers: I use attorneys as an example of how technology displacement occurs by freeing up qualified people to become lawyers. This has been going on for the last several decades to the point that now 20% to 50% of new graduate attorneys are unable to find jobs as lawyers. Their jobs have been eliminated via oversupply of lawyers. But it's getting worst. IBM's new artificial intelligence technology Watson, which went on the game show Jeopardy and beat the pants off of the two highest winning champions, is now commercially available. Watson's declared target market is medicine and the law . . . automated lawyers.

Artist and Song Writers: Now there's even computer programs available to create art pictures and write the tunes and jingles used in advertizing. These are career fields that just a few short years ago, most people would have emphatically said was impossible to replace people with machines. This shows the reality that no one is immune from technology displacement, for no matter what the job might be, no matter what the pay bracket is, you can be replaced.

Like the movie 'Where the Boys Are', we face the question, where are the boys . . . and girls of our society going to go to? The answer- look at the images of the homeless people camped out on the streets of Los Anglais and San Francisco . . . because that's where they end up!