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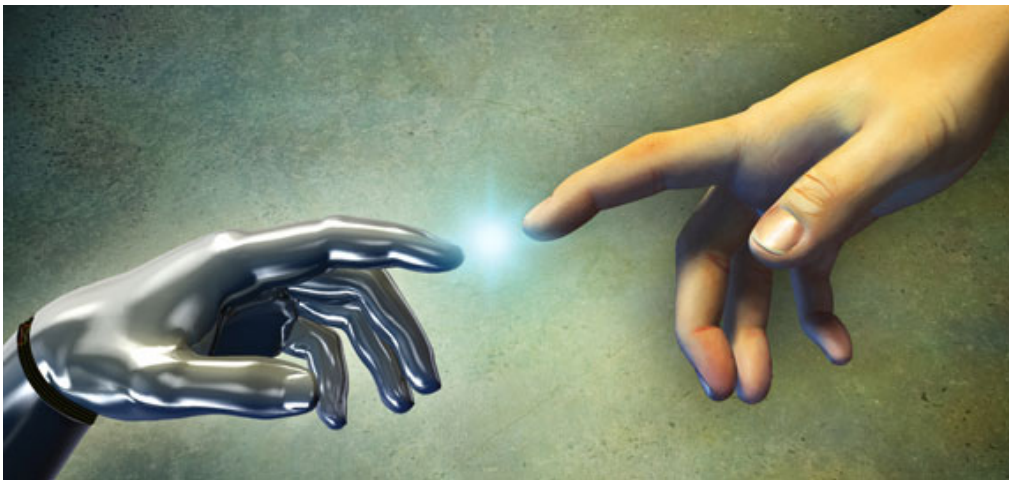
Inc.

Drew Greenblatt | Inc.com contributor

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6 Ways Robots Create Jobs

Don't believe the hype about job-killing robots--robots helped our company increase hiring.



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When I bought Marlin Steel 15 years ago, it was the biggest bagel basket maker in the country. The most modern technology in the plant, however, was a fax machine. We built every basket by hand. Our best workers turned about 300 wire bends an hour to make the baskets--an impressive bend every 12 seconds. All that elbow grease landed more than a few employees in the emergency room as a result (and the company didn't provide health insurance back then).

Fast-forward to today: A dozen robots on our shop floor form steel wire baskets at the rate of 20,000 bends an hour, or about five per second. The precision is light years beyond what we were capable of before, with tolerances measured to the thousandths of an inch. That craftsmanship allowed us to expand beyond bagel baskets into industrial containers for sensitive material for clients in automotive, aerospace, military, and health care. And with robots tacking the most brutish work, our employees' well being has dramatically improved as well: Our last lost-time accident occurred during the Bush administration, more than 1,500 days ago. (And workers now get health insurance.)

That doesn't mean we don't need people. The argument by some, including on a recent "60 Minutes" segment, that robots rob jobs is overly simplistic. It echoes the old adage that generals are always prepared to fight the last war--to use old tactics to win new battles. Without robots our company would be out of business.

Here are six ways robots have created jobs at Marlin Steel Wire Products:

1. Speed

We're producing baskets 60 times faster than a decade ago. We win orders based on our quality and speed. That makes us more competitive, increases demand for our products, and enables us to add workers. We just won our biggest order of the year from a German company, which needed steel wire baskets to carry parts through an assembly line at a U.S. factory. We won over the existing German supplier, which offered four months for delivery. We countered with four weeks, which we could promise because of automation. That order has the potential to grow 15-fold and require perhaps 15 more employees to handle it.

We gained another order last week when a manufacturer's laser failed and they sought us to cut a tractor-trailer's worth of sheet metal. We received, cut and reshipped in a day. If that job grows, as it also has potential to do, we may need to add a couple of workers to a graveyard shift.

2. Productivity

The issue for America isn't just about creating jobs; it's about creating good jobs. Value-add-per-worker is a metric calculated by dividing revenue (less material costs) by the number of employees. VPW averages \$14,000 a year at a Chinese factory, \$100,000 in the U.S. The way to ensure that American workers will have higher wages, more benefits, and greater job security is to drive productivity and that value number higher. Robots help accomplish that. Recently, we won a huge order for sheet-metal brackets. The brackets were formerly made in China by workers who earned \$2.50 an hour and produced perhaps 50 an hour. Our sheet-metal operator earns 10 times that rate, but sets up a robot that produces 2,000 brackets an hour. That's why we won that job away from China, while paying a livable American wage.

3. Quality

Precise work, done right the first time, helps generate reorders, referrals--and more business to sustain more hires. Our robot-enabled quality helped us earn the ISO 9001:2008 designation, a quality management gold standard for our industry. That credential is a requisite for us to bid for many large orders that, again, provide work for humans.

4. Innovation

Software and robotics allow us to test creative solutions to win business. If we want to try out a part, we can run it on our robot in 20 minutes, and know instantly whether it will work. We used to have to wait weeks for a test part from an outside vendor.

5. Efficiency

Robots bring greater accuracy to the job of cutting sheet metal and bending wire forms so we have less waste and fewer "choke points," which makes us more competitive.

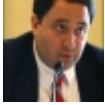
6. Safety

The robots perform nasty and tedious tasks round the clock, typically the ones that were most dangerous. Robots have made us safer, but does that create jobs? Yes. My worker's compensation rate just fell--

while rising 30 percent on average for my peers. Tens of thousands in savings on premiums translates into more resources for staff and other critical needs.

Two hundred years ago, 90 percent of Americans farmed, feeding all of us (and not especially well). Now, less than two percent of the population farms and feeds much of the world. We don't bemoan those productivity gains or the loss of the backbreaking jobs that once defined agriculture. The same thing is occurring with 21st century manufacturing: As technology becomes more affordable, the repetitive, unsafe aspects of factory work are diminishing. And employers that couldn't compete using yesteryear's methods are able to find and serve markets that didn't even exist before.

<http://www.inc.com/drew-greenblatt/6-ways-robots-create-jobs.html>



***[Drew Greenblatt](#)** is the president of **[Marlin Steel](#)**, a U.S.-based manufacturer of wire baskets and sheet-metal fabrications. Marlin has grown 25% over the past three years and has a record of 1,422 days without a safety problem.*

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