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HUMANS ARE WINNING THE BATTLE WITH ROBOTS

Companies like Airstream, the maker of retro-cool, high-end trailers, find it more efficient to use a workforce of people, rather than make sizable investments in automation that risks being wasted if the economy slows.

By John D. Stoll
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JACKSON CENTER, OH — Airstream's factory here is racing to fill a backlog of orders for its retro, high-end travel trailers that spans well into next year. The company is hiring, adding dealers and spending $50 million to build a bigger plant.

I counted eight workers climbing through an Airstream to bolt a hulking aluminum shell to a steel chassis, and snake fluid lines and wires through walls. To finish the shiny, silver capsule off, workers will need to install 3,000 rivets by hand.

There's not a robot in sight. They may speed production, but the machines require a substantial investment that risks being wasted if the economy slumps.

"You don't want to have a robot just sitting there," Bob Martin, the chief executive of Airstream parent Thor Industries, told me this week.

That's a big reason many in American business have yet to welcome our new robot overlords, even though Friday's jobs report is expected to show the historically tight labor market getting tighter. Unemployment below 4% is pushing up wages and making finding skilled workers at a competitive wage tougher to do.

"We see in U.S. manufacturing a race between technology and human capital," Stanford University economist Nicholas Bloom said. While some companies like electric-car maker Tesla Inc. are racing to automate almost every process on the factory floor, he said many executives are reluctant to sink investments in equipment that "will be hard to reverse."

We'll continue to see innovation in fields that are traditionally dependent on people. For example, grocery stores, which often struggle to find people to work for lower wages, are experimenting with robots. Analysts say it could take decades, though, for these initiatives to meaningfully alter the employment picture.

Robotics spending is forecast to equal $90 billion in 2018, according to researcher International Data Corp., with a hefty chunk of that investment aimed at industrial or manufacturing uses. That is a considerable increase compared to prior years, but it is only a sliver of the nearly $3 trillion committed to capital investment.

John Van Reenen, a Massachusetts Institute of Technology economics professor and Mr. Bloom's research partner, said executives in many industries —including health care and retailing—aren't sold on the technical revolution. "There is a big debate on whether robots are really delivering on the productivity benefits they might promise."

At an event to commemorate the revamp of a factory west of Detroit last month, Ford Motor Co.'s president of global operations, Joe Hinrichs, said a lot of industrial automation happened several decades ago. Now companies are trying to "optimize how they use people" rather than install more machines.

Ford spent nearly $1 billion converting the factory to go from making small cars to producing pickup trucks. Much of that went toward new tooling for stamping out body parts, but relatively little went toward adding automation, Mr. Hinrichs said. Artificial intelligence is now integrated into the final inspection lines to boost quality. But skilled workers are needed to interact with the AI tools.

Mr. Bloom said incremental efforts like this are helping boost worker productivity, even if at a lower rate than was experienced during the decadelong boom that started in the mid-1990s. He said economists may need to get comfortable with 1% annual productivity gains, particularly because it takes a lot of investment just to maintain that modest rate.

"After the [financial] crisis hit, sectors such as financial services went from boom to bust, and companies reacted to weak demand and uncertainty by holding back investment, driving capital-intensity growth down to the lowest rates since World War II," a report published this year by McKinsey & Co. said.

Earlier this year the tide appeared to be turning. The Bureau of Economic Analysis reported nonresidential fixed investments had increased at an 11.5% annual rate in the first quarter and 8.5% in the second quarter.

Business investments slowed to 0.8% in the most recent period, however. Analysts blame lower optimism on a volatile political environment, including threats of a trade war.

The Business Roundtable, which regularly surveys CEOs, found its quarterly CEO economic-outlook index fell in recent months due to increased uncertainty. This is directly leading to plans for lower capital spending, the organization said.

Economic uncertainty is always present in businesses like the RV industry, which is highly cyclical. RV wholesale deliveries cooled significantly in September, adding further concern.

Airstream's order bank remains robust, but Mr. Martin said the company's investors still expect a measured approach, one that doesn't take long to amortize capital spending. "One of the more attractive things about our industry is payback at our factories is really quick," Mr. Martin said.

Airstream's parent company has increased capital spending in recent years to keep up with demand, but most of that money has gone toward buying land or putting up walls to make room for employees to build more trailers and motorhomes.

Mr. Martin said cargo trailer makers in the past have used robots to try to speed assembly. But those investments are hard to justify. Instead, on the factory floor in Jackson Center, workers still swarm with hand tools.

"It's very much like building a house on wheels," Airstream CEO Bob Wheeler said. The company focuses instead on incrementally refining the manufacturing process, using the "continuous improvement" principles that originated with Toyota decades ago.

As we talked, two employees, separated by a wall of aluminum, used a rivet gun and "bucking bar" to work together to fasten one of those 3,000 rivets in an Airstream.

Had the company had considered buying machines that can install all of those rivets without the help of human hands?

“We have a dedicated workforce and low turnover here,” Mr. Wheeler said. “We’ll keep investing in them.”