Using AI to bring out the best in people, in Mexico

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By **Prasad Akella**
Founder and CEO,
Drishti

There's a lot of hype about machines in manufacturing—robots, cobots, additive manufacturing, smart devices, sensors, etc. And traditional ROI models are centered around the idea that savings equal removing human beings from assembly lines.

Automating direct labor is the pervasive sentiment because most manufacturers think that their primary path to productivity is automation. That humans have been optimized. That we've gotten the best we can out of human workers, and there are no more efficiencies left to gain, no more improvements to be had.

Prasad Akella, Founder and CEO, Drishti

I am here to testify that those beliefs are not only outdated but they put manufacturers at a severe competitive disadvantage.

So, how do you get more efficiency from humans on assembly lines? By using AI that works with people.

In manufacturing, companies use AI to augment human workers, delivering analytics and insights to the right person, at the right time, to improve decision-making.

Imagine you're working on the line and miss the second screw on a radiator cover, and a tablet displays an alert reminding you to double-check your work. Or say you were a quality engineer trying to determine which units needed to be scrapped out of a lot size numbering in the thousands. What if you could conduct instant, video-based, root-cause analysis and narrow down by serial number the exact units that were defective?

AI in action: A case in Mexico

To better illustrate this point, I want to share the experience of one of our customers, a Tier One automotive supplier, at its plant in Guadalajara, Mexico. A lean manufacturer, this customer places enormous importance on standardized work adherence. But shift leaders had to monitor anywhere from two to four lines, and they were spending a lot of time walking around. Even with the highest levels of diligence, they were bound to miss standardized work deviations.

average of $10,000 per defect, in 12 weeks

The company also ran a kaizen event. But because it had AI automatically generating cycle-time data, it was able to conduct the kaizen with more than 1,000 cycles without disrupting the activities on the plant floor or requiring dedicated data-collection time from industrial engineers.

The team used this data to identify ways to improve efficiency by 11 percent, reduce scrap by 15 percent and improve standardized work adherence. To top it off, the kaizen was 50 percent shorter than a traditional event.

What really inspired me was the feedback from the customer team. When the AI was first installed, the line associates were nervous about working under what they perceived as constant surveillance.

Once they saw Drishti in action, and were able to use the analytics and insights provided to improve their own work and help brainstorm system-wide process improvements, they immediately saw the new possibilities AI presented and started to get creative with the system.

From the leadership team to the plant manager to the line associates, it quickly became clear that AI in the factory was a fantastic solution to help human workers achieve greater levels of success; a human plus machine scenario where AI enhances the capabilities of, rather than replaces, human workers.

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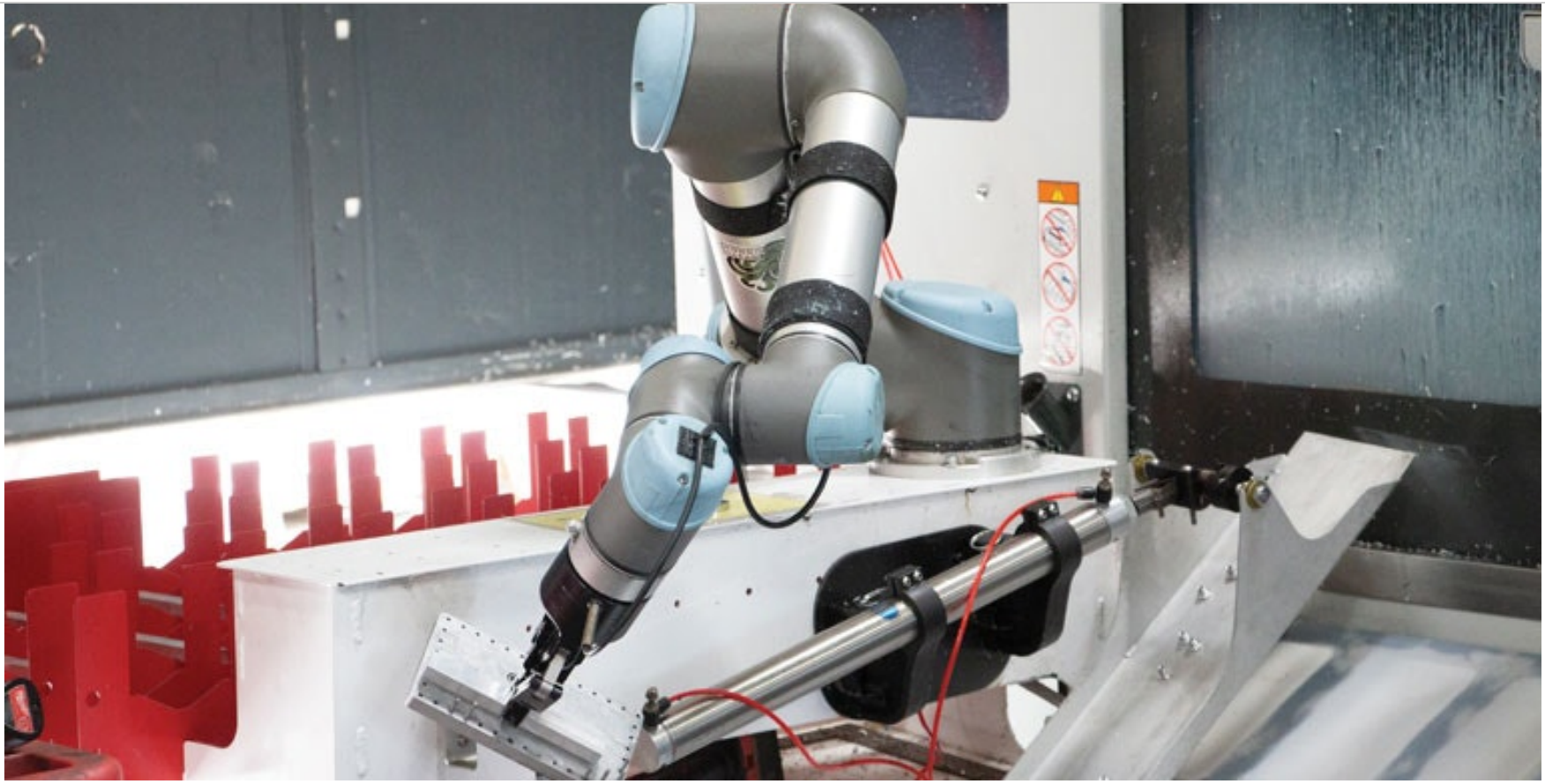

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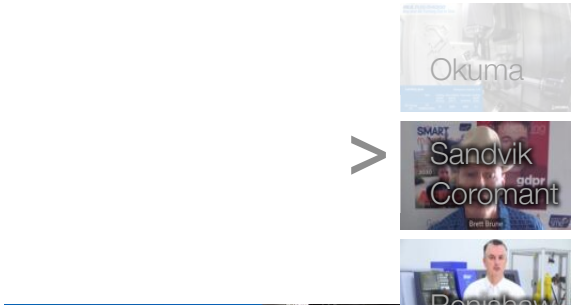

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