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In the Trenches: AI and robotic technology in produce

By

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Suppose you are shopping in the produce department, looking over the varieties of tomatoes. All of a sudden there is an unexpected tap on your shoulder. You turned around and a robot says, “can I help you?” It’s possible you’d jump out of your shoes. I absolutely would.

This scene may no longer be out of some science fiction fantasy. Those robots are now here — and they are getting more sophisticated. These artificial intelligent-driven robots are programmed to respond like humans with unlimited solutions to multiple tasks.

Artificial intelligent-driven robotics are in the process of turning the corner on technology for the entire food industry. In-store robots are still in the experimental phase. Perhaps you’ve even encountered one moving along the store aisles cleaning floors. The machine pauses as it senses a customer approaching and resumes its duties as it again moves along the floor after the customer passes. These robotic machines are only the start of what is trending.

The produce industry is undergoing a different and huge transition as it approaches the doorsteps of AI technology as well as robotic engineering. This technology will be able to elevate the efficiencies of operating the produce business. You have between three and 10 seconds to capture a shopper’s attention. A robot can do it within one second.

There are numerous types of robots. Some are overseen by a person who operates the programmed manipulator control arms. Those robots perform repetitive factory assembly line work of high-level precision. They don’t take any days off, breaks or call in sick. They just keep on working in the same mechanical way without slowing down or getting bored.

There are also robots that operate independently on their own without a person required to control them. They are depended upon to handle data and work around dangerous hazardous areas.

Then there are robots that assist a person and work around certain situations whereby the person can control it to perform tasks that can protect workers from getting injured.

Here are several ways artificial intelligence and robotics can streamline the produce industry:

- Robots are easily able to fill the labor gaps when produce managers have difficulty hiring and keeping workers. Robots don’t have to be interviewed for the job, simply programmed to do

the job.

- Greeting robots can welcome customers at the entrance door and hand out ad flyers with coupons and be stationed there at all hours without any special quitting time.
- Robot clerks can be programmed to check inventory, place orders, scan product on display and determine amounts required for restocking.
- The most frustrating chore for grocery store shoppers is waiting in long lines at checkout. A Japanese company, Tokinimo, has been testing robotic checkout systems in an Osaka grocery store.
- Robotic shopping carts equipped with scanners are a unique customer service that can promptly help locate and recommend items for shoppers. The entire product in the cart can also be automatically tallied without scanning one item at a time at checkout.
- Custodian robots can help with chores around the produce department such as sweeping, mopping, cleaning and lifting heavy boxes while organizing the back-room areas. This relieves workers of humdrum tasks so they can focus on maintaining fully stocked displays.
- Agricultural robotic intelligence is having a big impact on farming. AI can analyze the soil for qualities required to sow seeds and manage the growth of crops.
- Weather robots can monitor imminent conditions and warn of any evolving storms that need crop protection ahead of time.
- Robot vehicles in the form of programmed driverless tractors, trimmers, sprayers, and harvesters, are useful technology to improve efficiencies. Agricultural drones are also a huge benefit in gathering vital data on crop development.

Artificial intelligence has entered this age with its mega-technology influence and is here to stay. Whether we like it or not, this technology is streamlining and transforming the entire produce industry.

Of all the requisitions placed upon workers, change is the most valuable — and the most painful. Did you know that 25 percent of people are against change all the time? Artificial intelligent concepts will take time to comprehend and accept, especially for those who are stranded in the past. Retailers that embrace new changes are those that will survive in the future.

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