

Article

Food fix – Navigating a climate of disruption

Food and beverage manufacturers are a conservative bunch. This group sticks with processes and packaging methodologies that have been in place for decades because, well, they work. On top of that, strict safety and sanitation regulations mean changing the way something is made could be an invitation for a Food and Drug Administration (FDA) inspection. It's easier – and more cost-effective –to keep the status quo.

But the golden age of food manufacturing has come to an end. The industry is under pressure to meet changing consumer demands.

To that end, people are opting for clean living which translates to organic, allergen-free products. They also want convenient packaging to satisfy the frenetic pace of on-the-go eating. And they want to know where their food is coming from, looking to local sourcing of ingredients. We are a nation of knowledge seekers armed with fitness trackers and caloriecounters that impact what we buy at the grocery store.

According to author and futurist Jess Kimball, the data that people have on their own health is about to get much better. "Combine that with people's increased interest and understanding in what they're eating, how it was made, where it was created, where it was grown," says Kimball, "it means you're basically seeing food as the next industry that is incredibly vulnerable to massive, unprecedented levels of disruption."

This disruption will play out on the plant floor in the form of flexible and connected production processes. And here's why: The addition of gluten-free, vitamin- fortified, and other consumerdemanded foods increase the number of product SKUs. According to the PMMI 2017 Trends in Food Processing Operations report, four out of five companies surveyed have 100 product SKUs and over half of the companies predict those will continue to increase, driving the need for faster changeover.

In addition, food and beverage companies must respond to new FDAimposed innovation efforts in the form of the Food Safety Modernization Act (FSMA). The FDA is asking companies to adopt processes that will not only help manufacturers guickly respond to a recall, but will proactively prevent them in the first place. The FDA offers recommendations on preventive controls including hazard analysis and critical control points (HACCP), allergen control, and record keeping. It's up to the manufacturer to figure out how to implement such strategies. Technology - from automation to analytics - will make the difference.

Now is the time for manufacturers to research which modernization efforts should be put in place to keep customers happy, meet regulatory requirements and avoid recalls at all cost.

"Technology is going to play a key role for companies to get closer to the consumer," says Ty Brannen, vice president of operations at Nestle Waters North America. "Whether it's social media, whether it's how you deploy manufacturing expertise and technology to go from rapid prototyping to scaledup manufacturing in the future, [it's about] how we build capability in our frontline employees and the assets we deploy to make products."

Just as important, it's about transparency. Everyone is looking for more visibility from farm to table. That means having the ability to track and trace ingredients down to the tree the apple was grown on. It means using automation to get products to market faster. It means having visibility across the supply chain to keep counterfeit products out. And it means pulling customer feedback into the R&D process.

According to Laura Villevieille, head of product development at Sir Kensington, a maker of condiments: "Transparency is the key to the future success of clients and customers being interested in you. And innovation should always come from what problem you're solving...and a degree of transparency when you talk to your customers."

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