NEW DEMANDS PROPEL IIOT ADOPTION IN F&B/CPG INDUSTRY

Serving consumers is not easy. While all manufacturers must listen to their customers, the pace of change for food and beverage (F&B) and consumer packaged goods (CPG) companies is staggering. Combine shifting consumer expectations with the challenges of globally sourcing raw materials and the rise of high-impact food recalls, the spotlight is shining brightly on the entire industry. Leaders are responding by using smart IIoT technology to build greater transparency and agility across their operation.

Margins are already razor-thin, so reducing costs in the production process is essential. Even a small percentage in energy or water consumption reduction can result in millions of dollars saved over time.

Smart IIoT devices and systems provide unprecedented visibility into the operations and health of all components involved in F&B/CPG manufacturing. Leading companies are using these smart devices to address five critical industry challenges.

Cost reduction
For every 1% reduction in feed moisture, dryer energy consumption can be reduced by up to 4%. The typical industrial plant in the U.S. can reduce its electricity use by around 5 to 15% by improving the efficiency of its motor-driven systems.

Supply chain optimization
Using machine learning approaches to model complex relationships improves demand plan accuracy. Forecasting errors can fall by up to 50%.

Comply with FSMA and other regulatory requirements
FDA estimated the total costs of compliance to be $368 million for domestic farms. Of U.S. consumers, 94% say that food transparency is important and impacts purchase.

Disruptive business models require agility
Dollar Shave Club proved that in a relatively short period of time, an entire segment can be disrupted. Through the combination of AWS, YouTube, and direct-to-consumer shipping, Dollar Shave Club transformed long-standing purchase behaviors. They were one of the first, but won't be the last to initiate this type of disruption.

Demand for transparency outside of the organization is stronger than ever.
70% of global water is used for agricultural purposes and 19% is used for industrial purposes. Even a 1% increase in Overall Equipment Effectiveness (OEE) can result in millions of dollars saved annually.

FIVE CHALLENGES TO THE STATUS QUO

1. Cost reduction
   - New demands propel IIoT adoption in F&B/CPG industry
   - Cost is already too low to allow even minor improvements in margins due to the constraints of high energy and water consumption.
   - Smart IIoT devices and systems provide unprecedented visibility into the operations and health of all components involved in F&B/CPG manufacturing.
   - Leading companies are using these smart devices to address five critical industry challenges.

2. Supply chain optimization
   - New demands propel IIoT adoption in F&B/CPG industry
   - A company must align its supply chain with operational strategies, considering both production and execution within the constraints of shelf life, production capacity, and inventory.
   - Mature organizations see significant revenue benefits of getting this right.

3. Comply with FSMA and other regulatory requirements
   - New demands propel IIoT adoption in F&B/CPG industry
   - Compliance with FSMA and other regulatory requirements is crucial for maintaining market access.
   - FDA estimated the total costs of compliance to be $368 million for domestic farms.
   - Of U.S. consumers, 94% say that food transparency is important and impacts purchase.

4. Disruptive business models require agility
   - New demands propel IIoT adoption in F&B/CPG industry
   - Disruptive business models require agility, such as Dollar Shave Club's innovative approach.
   - Dollar Shave Club transformed long-standing purchase behaviors through the combination of AWS, YouTube, and direct-to-consumer shipping.
   - They were one of the first, but not the last, to initiate this type of disruption.

5. Demand for transparency outside of the organization is stronger than ever.
   - New demands propel IIoT adoption in F&B/CPG industry
   - Demand for transparency outside of the organization is stronger than ever.
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FACTORS REDUCED CUSTOMER COMPLAINTS BY INCREASING CONSISTENCY

Step 1: Conduct a detailed vulnerability assessment of operational technology and information technology systems to identify the areas where IIoT technology can be integrated into industrial automation.

Step 2: Evaluate the results of the assessment with candor and honest reflection of how to improve overall workflows and commitment to actionable steps for cyber protection.

Step 3: Implement needed industrial tactical and strategic strategies for protecting the industrial ecosystem.

UNLOCK OPERATIONAL EXCELLENCE WITH COMPLETE TRANSPARENCY

Browar Warka decreased the number of mechanical and electrical downtime events by 39%.

Food & Beverage and Consumer Packaged Goods leaders turn to GE Digital to transform real-time equipment data into actionable insights. Visit our resource page to learn how you can unlock these benefits and more.

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