The Evolution of Automation

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About PMMI

Six Trends Driving Plant Floor Automation

• Lack of skilled labor, labor shortages.
• Global increase in product demand.
• Rising demand for flexible manufacturing.
• Producing products with consistent quality.
• Overall operating cost reductions.
• Smart machine technology and co-bots.
Projected Automation Applications in Packaging and Processing Operations

Six Reasons Why Automation is a Gradual Adoption Process

• Utilizing data for operational improvements will take years and will require educating the industry on how to gather it, use it, store it, and supply it.
• With automation costs decreasing, companies of all sizes will have an easier time achieving an acceptable ROI.
• Disparate and legacy systems persist and need to be connected, but upgrading can be expensive.
• IT and OT convergence for common strategies is still emerging.
• Open platform standards are evolving.
• Cybersecurity, in a layered systems approach, will help alleviate security issues.
The Challenges: Cost Justification, Workforce Education, Open Communications

- Justifying capital expenses to advance automation
- Developing the technical skills to implement and support automated machinery and software
- Partnering with the right suppliers

Interactive/Intuitive HMIs, Smarter Sensors, and Safety Improvements

Legacy Systems

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The Use of Robots Will Continue to Increase Due to Lower Cost Collaborative Robots
TOP 5 Expected Operational Improvements From Machine Data Collection

1. Increase uptime
2. Manage production schedules
3. Reduce WIP inventory
4. Measure production counts
5. Improve run rates and throughput

IT and OT Need to Unify Networks and Systems

THANK YOU!

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Actionable Steps

Most CPG leaders consider digital technologies to be a priority, but few help to define a clear actionable vision to lead to action.

There is opportunity now to help companies automate and understand the variables that will be fed into a machine learning model to avoid any missteps in keeping operations flexible.