

Empowering a Leading Multinational Food and Beverage Organization in Automating Tertiary Packaging Process with Fast-Moving SKU Lines

Overview

The customer, a leading food and beverage manufacturing company has been manufacturing over 35 flavors (SKUs) of products for Indian market through 7 different lines. The upstream processes were fully automated, but the packaging process was manual, and this created a bottle neck.

Key Challenges

- ▶ High dependency on manual process
- ▶ Existing legacy system integration issues
- ▶ High level automation was not feasible due to space constraint
- ▶ Low-Cost Solution target

Our Approach and Solution

- ▶ Conducted due diligence to develop user requirement specifications (URS) in compliance with machine equipment and Safety Standards
- ▶ Developed 2D layout, mathematical models and simulation Analysis
- ▶ Conducted feasibility study for robotics, gantry, co-bots and palletizers
- ▶ Identified 5 potential partners from over 80 system integrators across globe
- ▶ Validated over 34 layouts against varying scenarios like - SKU per line, conveyor speed, infeed rate, MTTR and case overflow
- ▶ Final implementation with finalized partner - factory acceptance test / site acceptance

Business Impact



Low-Cost solution from barcoding, robotics, conveyors and palletization



26% improvement in carton packaging rate



Modular Design for scalability



70% reduction in operators

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Tech Mahindra delivers exponential value to engineering enterprises by collaborating with them across three key tenets: **robust products, ubiquitous platforms and cyber factories**. The vision for Tech Mahindra engineering is founded on the new digital economy considering emerging market trends like digital engineering, intelligent workplaces, adoption of tele-everything, end-to-end connected and immersive approach covering smart manufacturing and the need for an overall resilient business framework.

We call this approach of **accelerating** outcomes, **inventing** better products and **transforming** businesses into digital as – Engineer your **NXT.NOW™**!

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