CASE STUDY How Yamamotoyama Uncovered a Huge Hidden Loss with Digitized Downtime Labelling and Reporting

Company Profile

Yamamotoyama is the world's oldest tea company, in business for more than 330 years and remains family-owned and operated. A Japan-based company with US divisions based in Pomona, California, Yamamotoyama uses a state-of-the art, Safety Quality Food Institute accredited production facility to produce product lines including: a variety of green teas, seaweed, wrappers and teaware. Yamamotoyama is the household name for green tea and seaweed.



RAVEN



The Challenge

As a leading tea manufacturer, Yamamotoyama needed a digital transformation strategy to stay ahead of their competition across the globe. Yamamotoyama's plant was tracking production with pen-and-paper processes that were time-consuming, unreliable and lacked real-time visibility into OEE. Up to 40 labor hours/week were wasted due to the manual collection of downtime information; a process that was missing important operator context and caused an increase in errors due to their tedious nature. On top of that, a 24-hour reporting delay meant that the operations team could only identify production issues once it was too late to resolve them.

Yamamotoyama needed a digital OEE improvement solution that fit into their plant's day-to-day and added value to their frontline's work — without disrupting their existing operations.

The Solution

Raven worked closely with Yamamotoyama to help their frontline and operations team gain real-time visibility into shop floor performance, and account for 100% of production time and OEE losses. By connecting operators and supervisors to the data that mattered most to them, teams understood downtime reasons and collaborated together to drive productivity improvements. Raven provided proof of concept by 1) digitizing their tea-bag machines, 2) automating downtime data entry and 3) showcasing real-time reporting capabilities for both frontline and organizational awareness.

Yamamotoyama gained accurate and meaningful data insights into their plant performance by:

- Having 100% visibility into OEE performance on all pilot machines
- Working with their operations group to identify downtimes and categorize them in a comprehensive way
- · Giving their operators an easy-to-use, intuitive interface for downtime labeling, using Raven's smart assistants
- · Identifying trends for rejects, speed performance and machine downtimes with real-time data reports
- Automating downtime categorization and data entry using Raven's Automated Contextualization Technology (ACT)
- Engaging stakeholders to prioritize continuous improvement initiatives and move their digital transformation strategy forward

The Results

The Yamamotoyama operations team loved the turnkey deployment, simple software implementation and step-by-step training of Raven. Data-led weekly discussions and ongoing support with Raven's success team helped create more engagement and stakeholder buy-in, building change management champions throughout the plant. By including champion feedback and working closely with the Raven team, Yamamotoyama customized the rest of their deployment to suit their exact operational needs. The shop floor data collected in the first few weeks shed light on a significant "hidden" loss on their machines — an 11% performance slowdown loss. This loss wasn't captured through their manual processes, as it required both historic and real-time tracking of production rates over a sufficient period.

Raven's Top Losses and Opportunities Reports highlighted systemic issues, enabling Yamamotoyama's leadership to drive smarter decision-making and actions that resolved the root cause of production issues and in turn reduced downtime, increased capacity, and achieved labor costs savings.

"We're looking forward to making the Raven platform the standard for our whole operation."

- Luis Munoz, Plant Manager, Yamamotoyama

Performance & Loss Breakdown

See where your time went

Producing 425 181h 32m 67% Effective Producing Time 418 151h 35m 56% Quality Loss + WIP Increase 1h 21m 0.5% Slowdown Loss 29h 50m 11%
Quality Loss + WIP Increase 1h 21m 0.5%
Slowdown Loss 29h 50m 11%
Minor Stop Loss 8 7m
Planned 25 49h 19m 18%
Setup 25 49h 19m 18%
Oupplanned 147 26h 32m 10%

About

Raven helps manufacturers empower teams to make confident, fact-driven productivity improvements in real-time. Raven's OEE improvement software is the only solution that accounts for 100% of production time, with meaningful context for every second. With its frontline-first design, Raven empowers operators to easily tag downtime reasons – only asking questions when machines don't have the answers. Raven combines operator and machine context to create a complete timeline of events, eliminating hidden losses.

Contact

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