



The Ultimate Guide to Unlocking Your Production Data with AI

How to use AI-powered analytics to save time, prevent errors and improve quality in your food, beverage or liquid production facility

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Industrial AI for Smart Food, Beverage & Liquids Production

PLAATO Insights is built for the entire world of batch-based manufacturing: from breweries and distilleries to producers of paints, chemicals, and personal care products.

Wherever liquids and semi-solids are formulated at scale — whether it's dairy, resins, or high-performance coatings — our platform connects process data, production control, and performance analytics into a single, unified view. We call it 'Industrial AI' — artificial intelligence engineered specifically for the complexities of batch processing and liquid manufacturing.

With experience across 400+ production facilities worldwide, we work with teams ranging from innovative craft producers to some of the world's largest beverage houses, including names such as Chivas Brothers, Maui Brewing, Cloudwater, and leading cider makers.

Our goal is simple: to empower smart food & beverage or liquids production with industrial AI — giving every producer, whatever their size, the insight and control once reserved for global corporations.



PLAATO Insights works for batch-based food, beverage & liquids production facilities



Breweries/Malting



Beverages



Distilleries



Food



Paint and coatings



Baking



Dairy



Chemical



Home and
Personal care

At PLAATO, we work with **over 400**
facilities around the world



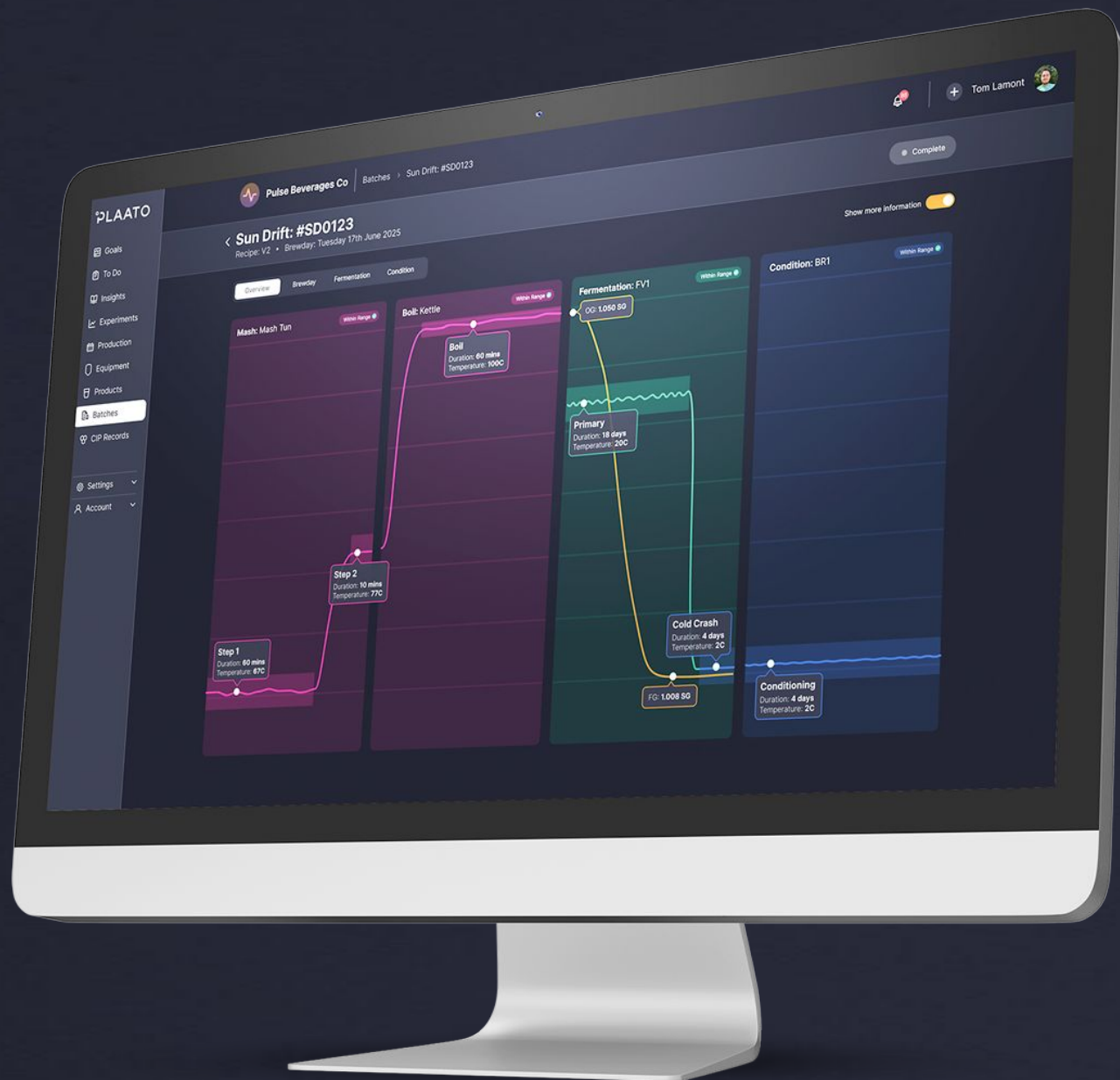
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Your Facility. Your Data. Fully Connected.

PLAATO Insights is an AI-powered manufacturing intelligence platform for F&B (food & beverage) and liquids. It connects your existing equipment and brings your production data into one unified system.

PLAATO Insights provides:

- End-to-end visibility, from your production floor to your packaging
- Automated data collection, reducing manual data collection
- Actionable insights to improve efficiency, quality, and uptime



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Connecting your facility to **PLAATO Insights**

Edge Gateway: The gateway connects to your PLC(s), enabling seamless data extraction.

Multi-PLC setups: PLAATO supports a wide array of setups, and can connect to one or many PLCs, bringing all the data together in one central location.

No disruption: Installation is simple and non-intrusive — no need to change current control systems.

Optional Add-on:
PLAATO Fermentation Sensors: *inline sensors that track density, temperature, and fermentation progress in real time.*



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The benefits of Industrial AI for **your smart beverage facility**

Here are just a few of the ways connecting your facility's equipment, and analyzing it through AI, can bring transformative change for your business.

1. Turning data into measurable impact
2. All your production data in one unified platform
3. Always have the data you need to drive improvements
4. Instantly identify quality issues and root causes
5. Understand and optimize your asset utilization
6. Predictive and proactive maintenance
7. Talk to your facility's data – with PLAATO Copilot



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1. Turning Data into Measurable Impact

PLAATO Insights enables better decisions, optimized production, and improved quality. All powered by your own data.



2. All your production data in one unified platform

- Access all historical data instantly. No manual logs or spreadsheets
- Visualize and compare batches from grain to glass
- Benchmark performance against recipes and historical runs



3. Always have the data you need to **drive improvements**

- Stop spending time collecting and cleaning data manually
- Back up every improvement initiative with accurate, structured data
- Enable continuous optimization through trend analysis and automated reporting



4. Instantly identify quality issues and root causes

- Review batch data to pinpoint where and why deviations occurred
- Compare quality metrics between batches
- Enable full traceability from raw materials to packaged beverage or liquid



5. Understand and optimize your asset utilization

- Track how efficiently each fermenter, tank, or brewhouse vessel is used
- Identify bottlenecks and opportunities for higher throughput
- Explore whether you can produce more with existing assets or reduce batch times



6. Predictive and proactive maintenance

- Get instant alerts when components fail or drift from normal performance
- Predict failures before they happen with performance trend data
- Reduce equipment downtime



7. Talk to your facility's data with PLAATO Copilot

- Using Large Language Model systems, such as ChatGPT, PLAATO Insights enables you to 'chat' with your facility to find areas to improve
- Find out which parts are operating optimally, compare your metrics in real-time, over quarters and even over years
- Spot issues before they happen and ensure you stay on track to meet your sales commitments

Show me the utilisations of my fermenters for Q2 and Q3 for 2025

Show thought process

Fermenter Utilisation (OEE) — Q2 vs Q3 2025

Summary

- Average OEE
 - Q2 2025: 81.13%
 - Q3 2025: 67.19% (▼ 13.94 pp vs Q2)
- High-performing (≥70% OEE)
 - Q2: 6/7 fermenters
 - Q3: 4/7 fermenters

Utilisation by Fermenter

Fermenter	Q2 2025 OEE	Q3 2025 OEE
<u>FV1</u>	94.87%	66.91%
<u>FV2</u>	98.34%	94.94%
<u>FV3</u>	78.74%	83.18%
<u>FV4</u>	90.70%	39.55%

Ask a question...

Stop

Fermenter Utilisation (OEE) by Quarter - 2025

Q2 vs Q3 2025



Notes

- Biggest declines: FV1 and FV4.
- Consistently strong: FV2, FV5.
- Persistently low: FV7.

Want me to break this down by occupancy counts and idle hours to diagnose the drops on FV1/FV4?

●

Show thought process

FV1 vs FV4 — Monthly Utilisation (OEE) in 2025

Monthly Fermenter Utilisation (OEE) — FV1 vs FV4 (2025)

Jan–Dec 2025



Quick take

- FV1 strong from Apr–Jul; dip in Aug–Sep; recovers to 98–100% Oct–Dec.
- FV4 excellent May–Jul; sharp drop Aug; idle Sep–Dec.

Key areas PLAATO Insights can help a facility with include:

Area of impact (examples)	What PLAATO Insights does	Typical impact
1 Increase Throughput	Optimizes sequences, speeds up processes, cleaning, detects bottlenecks, idling, over-production – and more	5 to 15% higher annual output
2 Reduce Downtime	Delivers early warning analytics on your equipment, as well as predictive maintenance	20 to 30% less unplanned downtime; 10 to 20% improved equipment life.
3 Improve Quality & Consistency	Gives statistical process control and AI deviation alerts and benchmarking	20 to 40% fewer deviations or reworks, less time wasted reprocessing
4 Maximize Yield and Reduce Waste	Pinpoints optimal timing for processes, detects stalls or sluggish operations, and continuously optimizes your production stages	1 to 3% yield gain 2 to 4% raw material loss prevented
5 Reduce Energy & Water Use	Predicts & implements process improvements like cooling, cleaning, water-flow, leak detection and tariff-aware scheduling.	5 to 15% savings on energy 10 to 20% savings on water and wastewater
6 Save Time & Automate Compliance	Auto-captures process and equipment data; auto-generates industry standard reports; creates digital batch traceability.	50% less time spent on reporting and documentation

Sector example: 50,000 hL brewery – illustrative ROI

Area of impact	What PLAATO Insights does	Typical impact	Illustrative ROI
1 Increase Throughput	Optimizes sequencing, tank turns, and CIP timing; detects bottlenecks; cuts idle or over-fermentation.	+5–15 % higher annual output (often 1 extra batch per FV per year).	+10 % throughput = +5 000 hL, worth ≈ \$750 000 additional revenue with high incremental margin.
2 Reduce Downtime	Early-warning analytics on pumps, compressors, chillers, and valves; predictive maintenance.	–20–30 % less unplanned downtime; +10–20 % equipment life.	If downtime costs \$700/h to \$1200/h, cutting 36 h/yr – 48 h/yr saves ≈ \$25 000 – \$58 000 per year.
3 Improve Quality & Consistency	Statistical process control and AI deviation alerts; “golden batch” benchmarking.	–20–40 % fewer deviations or rework; less time wasted blending/reprocessing.	If 0.2 % – 0.5 % of production is downgraded (≈ \$15k – \$37.5k loss), cutting by half saves ≈ \$7 500 – \$18 000 / yr.
4 Maximize Yield and Reduce Waste	Pinpoints optimal timing for secondary fermentations, detects stalled or sluggish ferments early, and continuously optimizes mash efficiency and attenuation.	+1–3 % yield gain; –2–4 % raw-material loss.	2 % yield gain on a \$3 M raw-material cost = \$60 000 / yr.
5 Reduce Energy & Water Use	Predictive cooling; CIP optimization; water-flow and leak detection; tariff-aware scheduling.	Energy: – 5–10 % (– 15 % if under-optimized cases). Water: – 10–20 %. Wastewater: – 10–20 %. 10 to 20% saving on water and wastewater	Total of \$250 k energy spend: saving \$12 k– \$25 k / yr. Total of \$100 k water + wastewater: saving \$10 k– \$20 k / yr.
6 Save Time & Automate Compliance	Auto-captures process and sensor data; auto-generates HACCP/FSMA/ISO reports; digital batch traceability.	≈ 50 % reduction in reporting and documentation time (≈ 300 h/yr).	At \$30 / h, saves \$9 000– \$12 000 per year, while ensuring consistent, audit-ready records.

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How we get started: Start small. Prove value. Grow together.

- **Scope:** 1 Edge Gateway connected to your facility's PLC (Programmable Logic Controller)
- **Goal:** Test the solution, visualize production data, and demonstrate measurable value
- **Optional:** Add fermentation sensors for inline density monitoring
- **Commitment:** No strings attached — evaluate after 3 months



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Pricing: Get started for free

Low-risk entry with high-impact results. Depending on your setup, we can send you a device for free to get started, or we can show how your data would look in our platform – and help you find wins right away.

Your AI Package:

- Edge Industrial Gateway
- Full data storage and team access in PLAATO Insights
- Technical onboarding and support
- Subscription: tailored to your budget, learn more at plaato.ai/pricing
- No commitment – cancel anytime



Implementation timeline: Step 1: Proving value first via proof of concept

1. Align on implementation plan and commercial agreement
2. Ship Edge Gateway
3. Edge Gateway installation (incl. PLAATO support)
4. **Onboarding:**
 - a. Account setup
 - b. Set up data transfer from PLC
 - c. Define performance metrics
5. Every two weeks or monthly team check-in (based on preference)
6. Performance evaluation and next steps (after ~3 months)



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Implementation timeline: Step 2: Scaling PLAATO Insights across your facility

- After a successful start and proof of value to you, we upgrade your remaining PLCs for end-to-end data collection and insights.
- Current customers demonstrate that end-to-end implementations provide significant extra value, as it provides visibility into how changes in one process stage (e.g. the first stage in your process) can correlate with changes in a later stage
- The expansion discussion only happens after we've proven value. The way we see it: start small, prove value, and grow together.
- For example, for breweries, the typical starting point is to run PLAATO Insights in your brewhouse or cellar – then we upgrade the rest of your facility.



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Just a few of the quotes from **customers** using **PLAATO Insights**

"You're turning data into information – and information into practical decision support."

- **Director of Operations, large beverage manufacturer**

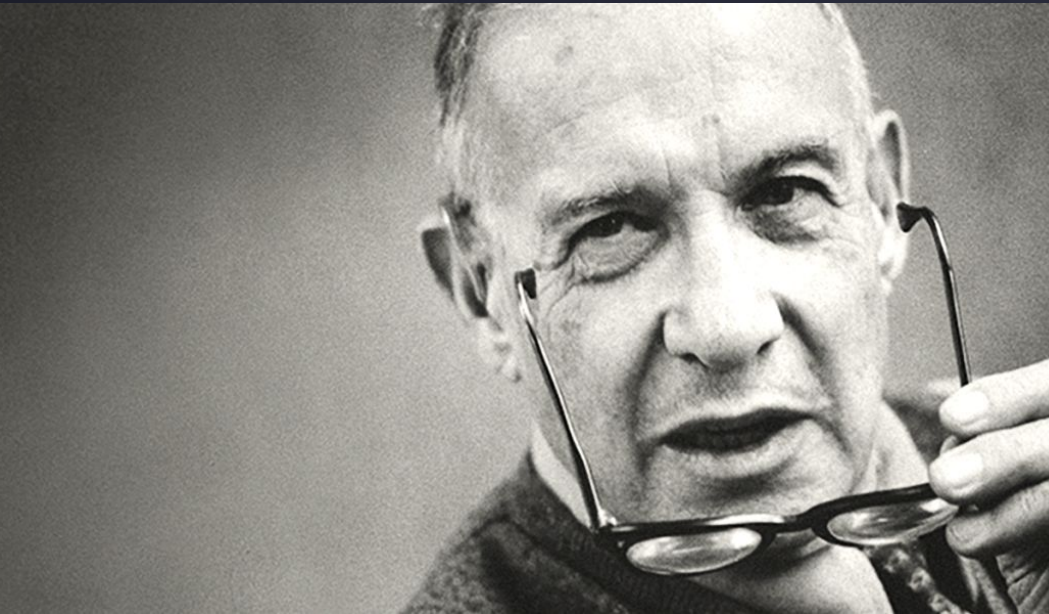
"It's hard when you're working blind."

- **Quality Assurance Supervisor, high-volume beverage production facility**

"Really close to what I envisioned."

- **Director of Quality, leading international beverage producer**





**"You can't *improve*
what you don't *measure*."**

— Peter Drucker

A founder of modern management theory

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Want to learn more about **unlocking your production data with AI?**

From breweries and distilleries to producers of chemicals, paints, dairy, and personal care, PLAATO's hardware and analytics software connects data across every type of batch-based liquid facility.

By integrating disparate data streams, we bring clarity, control, and consistency to more than 400 industrial producers worldwide — transforming complex production floors into high-performance operations.

Want to start making your beverages, in a smarter, more connected way?

Find out more at www.plaato.ai or contact us via www.plaato.ai/request-a-quote and we'll help you find the solution that fits you best.

Who is [PLAATO.ai](http://www.plaato.ai)?

PLAATO is bringing the best of AI, sensors, and analytics to food & beverage or liquid makers all over the world. Saving time, money and resources in ways never thought possible before.

Our PLAATO Insights product truly revolutionizes how production companies operate — giving them total visibility of their entire facility.



Thank you.

If you have any questions, please don't hesitate to contact us at www.plaato.ai or email hello@plaato.ai

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