

CloEE

AI Digital Advisor

Millions of data points, for better decisions

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CloEE Oy

7+
years in Industry 4.0

25K+
connected machines

15
years in information technology

400+
manufacturers in **25 countries** collaborated with

Supported by

Berkeley SKYDECK | AngelCoFund | BUSINESS FINLAND

- Our Product: Software for Manufacturers
- Our focus: industrial data.
- Our AI collects, analyzes, visualizes, benchmarks, and provides insights on downtime roots and improves OEE.

We make your machines **speak to you!**



CloEE

Our Vision

Democratize Intelligence
Make industrial AI accessible for factories of all sizes.

Instant Action
Enable decisions in seconds, not months.

Scale Industry 4.0
From pilot projects to global machine networks.

We seek partners **to help connect millions** of machines worldwide



Why Discrete Manufacturers Need Help

Industry Challenges

- 70% don't collect machine data at all
- 30% collect partially – old equipment with no connectivity
- Absence of real-time insights
- Benchmarking & reporting take months

Operational Gaps

- Root cause detection is manual and takes months
- Up to 60% costly downtime
- Poor planning visibility & resource utilization
- low OEE

Losses

$3 Million+

annual losses per plant from missed KPIs

CloEE's Impact using AI

- Data Collection
- Analysis, Structuring & Visualization
- Insights and Improvements

CloEE's Value

- 30% reduction of downtimes and rejections
- 20% improved planning accuracy and Equipment utilization rate
- Improved OEE by 70%
- AI Leapfrog to optimize the factory

Gains with CloEE

$1 Million+

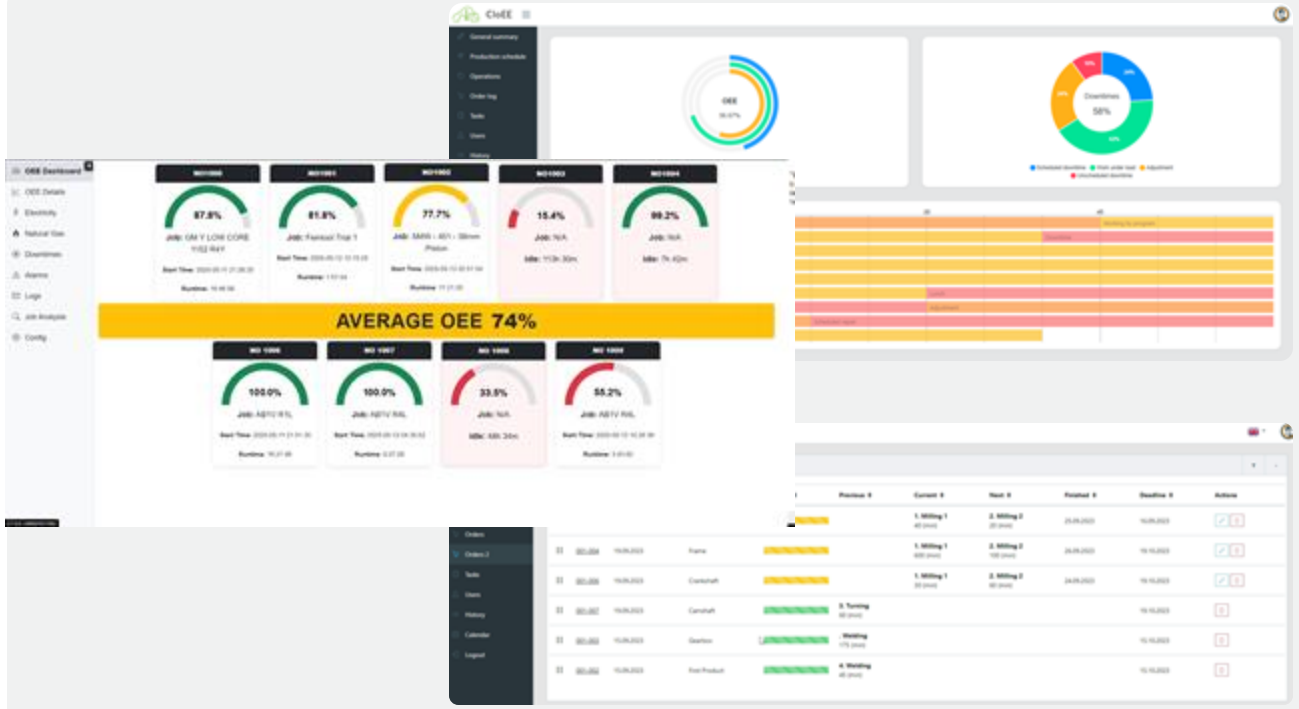
savings from Improvements

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What is CloEE's AI Solution?

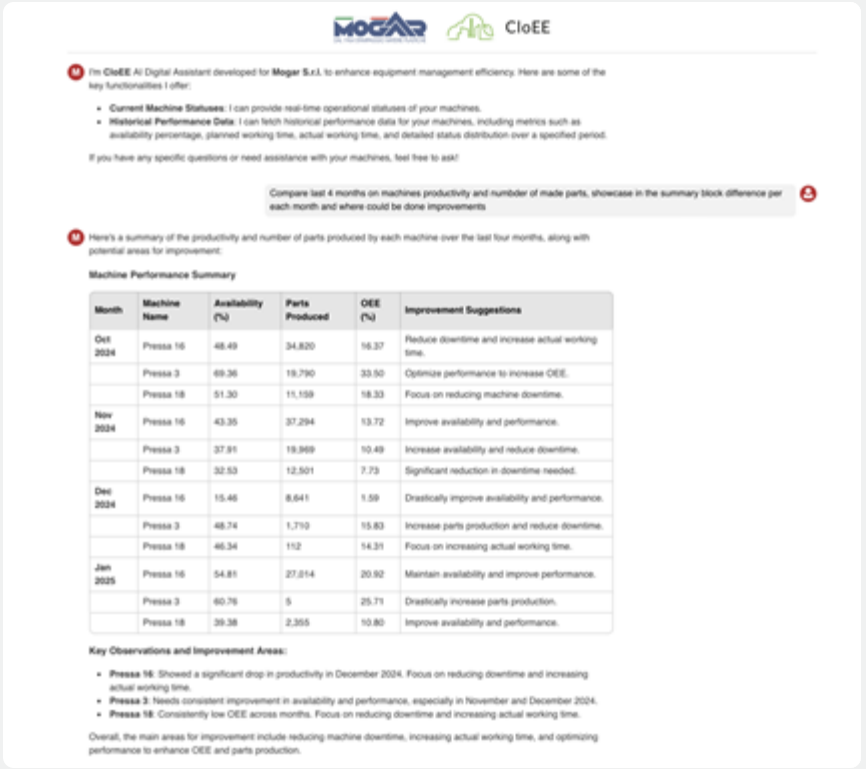
Modular Digital Platform[1]

- Visualization and tracking of OEE, downtimes, energy KPIs
- Mini MES for workflow and shift planning



AI Digital Advisor

- Data benchmarking 10 times faster than human
- Natural language queries



[1]More detailed information on modules in Appendices 1-3

Our Key Differentiators

We don’t just collect data — we transform it into real-time insights and intelligent recommendations.

Affordable & Scalable

Designed for mid-sized manufacturers with fast ROI.

Rapid Deployment

Insights from day one with 1-week setup.

2 months from pilot start to a full facility roll-out.

Wide Connectivity

Supports 200+ machine protocols including sensors and robots.

AI Diagnosis

Root cause analysis plus guidance— solve issues, don’t just report.



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Industry 4.0/5.0 POC Deployment Roadmap

Step 1

Project Assessment

Client provides machine and data details.

Step 2

Evaluation

Scope, timeline, and cost assessment.

Step 3

Pilot

Single facility pilot with up to 10 machines.
Budget 5-10k EUR

Step 4

Rollout

2-3-weeks pilot deployment & 2-month test.

Step 5

Contract

Estimate outcome and sign contract after successful pilot.

Case 1 - Injection Moulding Producer for OEMs

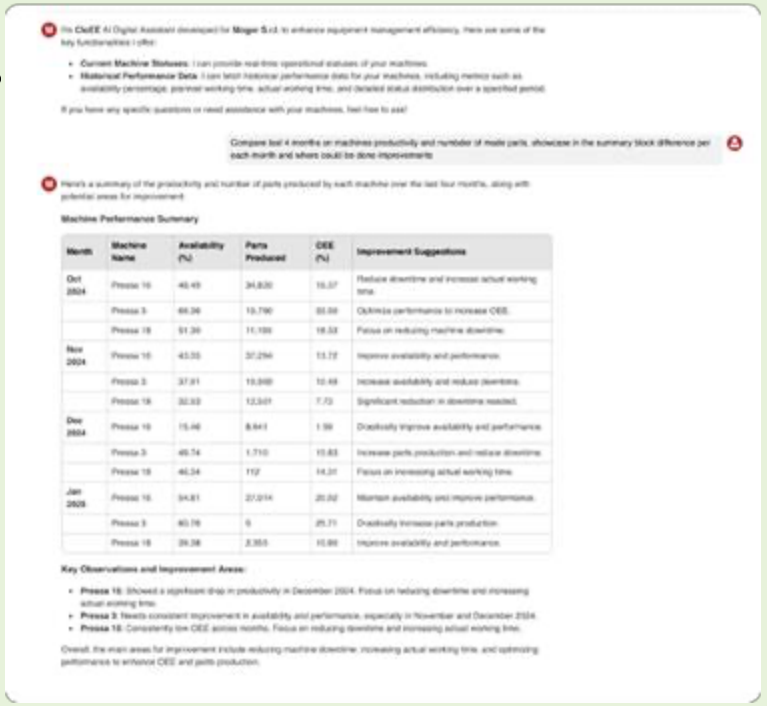
↘ Empowering Old Legacy Machines with AI Capabilities







- 20-year old injection molding machines
- Manual data collection
- Crucial to track alarm and production changes via notifications
- Need to automate report generation in Italian for OEMs
- Limited annual budget for the Digitalization and Ai
- Invested 6000 EUR in POC



Compare last 4 months on machines productivity and number of made parts, showcase in the summary block difference per each month and where could be done improvements

Machine Performance Summary

Month	Machine Name	Availability (%)	Parts Produced	OEE (%)	Improvement Suggestions
Oct 2024	Pressa 10	49.49	34,820	15.37	Reduce downtime and increase actual working time.
	Pressa 5	66.36	13,790	32.09	Optimize performance to increase OEE.
	Pressa 18	51.39	11,109	18.53	Focus on reducing machine downtime.
Nov 2024	Pressa 10	43.55	37,294	13.73	Improve availability and performance.
	Pressa 5	37.91	10,949	10.49	Increase availability and reduce downtime.
	Pressa 18	32.53	12,501	7.72	Significant reduction in downtime needed.
Dec 2024	Pressa 10	15.46	8,841	1.39	Drastically improve availability and performance.
	Pressa 5	49.74	1,710	10.83	Increase parts production and reduce downtime.
	Pressa 18	46.24	112	14.31	Focus on increasing actual working time.
Jan 2025	Pressa 10	54.81	27,014	20.02	Maintain availability and improve performance.
	Pressa 5	60.76	6	25.71	Drastically increase parts production.
	Pressa 18	39.38	2,353	10.66	Improve availability and performance.

Key Observations and Improvement Areas:

- **Pressa 10**: Showed a significant drop in productivity in December 2024. Focus on reducing downtime and increasing actual working time.
- **Pressa 5**: Needs consistent improvement in availability and performance, especially in November and December 2024.
- **Pressa 18**: Consistently low OEE across months. Focus on reducing downtime and increasing actual working time.

Overall, the main areas for improvement include reducing machine downtime, increasing actual working time, and optimizing performance to enhance OEE and parts production.

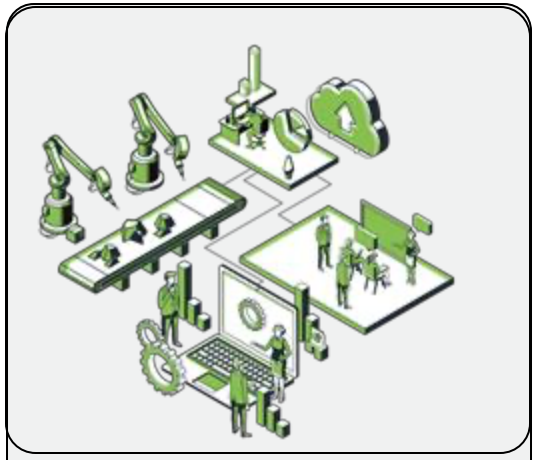
Case 2 - US Automotive Producer

Facility-to-facility Benchmarking for 200 Sites



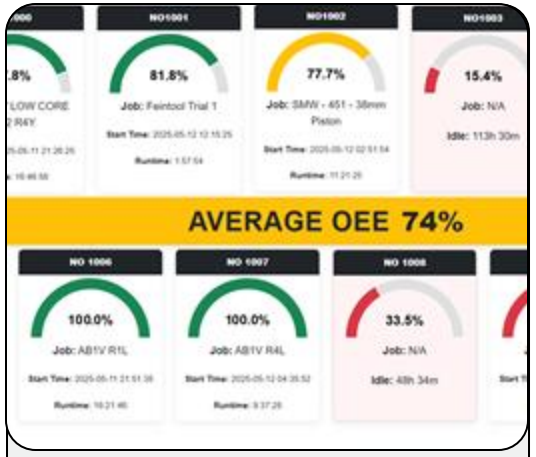
Site Setup

- 14 Furnaces per facility
- Parts received -> Heat treatment -> Ultrasonic Washer -> Pre-Ox and Nitrite in main Furnace -> Breakdown Loads -> Ship to Customers



Needs

- Obtain proper OEE
- Help management to improve the batch production process
- Decrease operational costs
- Identify core downtimes
- Benchmark data for 5-10 sites per supervisor



Ups & Downs

- A lot of data and OPC UA available
- Inhouse IT team spent 2 years at 1 site without ability to mass scale
- Ai was used to create Ai Solution
- Integrating on-premises/offline LLMs and ML models for security



Outcomes

- OEE, Alarms, Downtimes, Job's execution, TAKT Time
- Gas and electricity consumption tracking
- Automatic Environmental reporting for State Authorities

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Let’s Talk

Locations

- Finland, Helsinki
- Italy, Venice & Bergamo
- Switzerland, Zurich

Meeting Options

- In-person
- Calls
- Video and Demos available

Contact

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