

# Building a Connected Shopfloor Workforce

Unlock Sustainable Manufacturing by Empowering Operators to Make Real-time Decisions

*For too long, analytics and reporting have been the domain of high-level management. But this top-down approach creates a bottleneck, blocking people from using valuable insights throughout an organization, resulting in delays that can cost businesses millions in missed cost savings. To solve this, Cyzag created Whiteboard, a digital platform to democratize manufacturing data and create a stronger, more holistic culture of data literacy in the chemical manufacturing industry. John Papastylianou, founder and CEO of Cyzag, who has led the team to develop and deliver a best-in-class shopfloor digitization platform that enables and sustains continuous improvement, tells the story.*



John Papastylianou, Cyzag

## **CHEManager: What inspired you to start Cyzag?**

**John Papastylianou:** I've always been focused on chemical manufacturing efficiencies, leading and delivering large-scale manufacturing execution systems projects. Working mainly with big-tech vendors, I saw that two-year-plus projects for manufacturing systems weren't working and that users were left behind, meaning that the critical link to the shopfloor was broken and many projects ultimately failed to deliver.

Thinking about restoring the shopfloor link and delivering digital tools faster and more effectively, I initially launched Cyzag in 2012 because I wanted to show that focusing on shopfloor users was fundamental to chemical manufacturing's success. When data is passing safely from the hands of a few analysts into the hands of the masses within a company, you increase the population of decision-makers. This leads not only to greater efficiency and time, energy and cost savings but also improves staff retention and employee attraction. Since then, Cyzag has evolved manufacturing software based on customer needs and market changes. In 2018, we released our flagship product, Whiteboard.

## **What are the key ideas that drive Cyzag?**

**J. Papastylianou:** Cyzag exists to innovate how manufacturers enable their teams. We serve our customers to be driven by data and powered by people. We understand that operations want to own performance, but they need the tools to do the job. They need to access data and, as operation specialists, they need autonomy to make decisions in a timely manner, increasing speed and productivity and removing waste, but keeping the standard work processes and traceability.

*"Cyzag exists to innovate how manufacturers enable their teams."*

Whiteboard places real-time manufacturing data and decision-making into the hands of the right people, in the right place, at the right time. To do this, we developed a secure, cloud-based platform that can be easily tailored to each user in a matter of minutes. And users can develop their own flows and processes in a no-code and intuitive platform, gaining autonomy and speed.

To deliver sustainable continuous improvement, people are empowered to experience the tool's value, in ad-

dition to business requirements. This makes adopting the tool easier and the sustainability of the results much easier to reach. Cyzag focuses solely on processes in the chemicals manufacturing industry, so our customers know our product is created specifically for their needs.

## **What key challenges is the industry experiencing?**

**J. Papastylianou:** We talk to executives and managers across production operations, business performance and operational excellence in major chemicals manufacturers. There is a big desire to connect the shopfloor, increase performance in sustainability and input cost drivers, but many find it difficult to know where to start. Some have identified huge amounts of data but not enough information and insights to affect performance, particularly on the shopfloor. Many big digitisation initiatives have failed to bridge the gap between management performance objectives and the shopfloor.

## **Where is Cyzag on its journey?**

**J. Papastylianou:** We have our foundation customers, which are international chemical companies using our software in more than 80 chemical

## **PERSONAL PROFILE**

**John Papastylianou**, founder and CEO of Cyzag, is an innovator and creative and collaborative entrepreneur. He studied Mechanical Engineering at the University of KwaZulu-Natal, Durban, South Africa, and has an MBA from the Imperial College London. He began his professional career in 2001 and has more than 20 years' experience in the process industry, working for, among other companies, Hyperion Systems Engineering and GE Intelligent Platforms. John led and managed large-scale manufacturing execution system (MES) projects and worked as an MES consultant and software engineer. He continues to innovate, working with chemicals manufacturers to improve manufacturing performance at scale across their businesses.

plants in 11 countries, reaching thousands of users. The product market fit is proven, and we see a big demand for products like Cyzag Whiteboard in chemical manufacturing. We are at a high pace of development with a two-week release cycle. Right now, we are at the beginning of our scale-up, increasing our industry partners and investment.



**BUSINESS IDEA**

## Democratizing Manufacturing Data

Driven by numerous challenges, chemical manufacturing organizations have learned how to work leaner, cut costs and use data analytics and digital technologies to stay competitive. But the data revolution is not just about collecting or keeping the information in a few hands—digital technologies cannot be restricted to specific initiatives or parts of the organization.

Cyzag believes technology and data are best used when they enable individuals to perform better in their daily work, pursuing a culture of improvement and feeling valued. Cyzag Whiteboard creates a solid foundation from which chemical manufacturers can embed best practice and scale. Whiteboard connects shopfloor workers with the data they need to improve manufacturing performance, shift by shift, day by day.

By giving operations powerful tools that make their job easier and harness their talents, Cyzag is able to embed a digital infrastructure through which they can implement consistent processes and build collaboration and improvement culture from the shopfloor up. The tool is built based on a three-

step process to continuous improvement (CI) and sustainable business growth. These steps are:

**Align:** Cyzag makes sense of customer data, generating a single source of truth and streamlining standardized work processes, such as daily meetings boards, task management, shift logbook and hand-over.

**Optimize:** Cyzag moves decision-making to frontline workers, saving time and money. Whiteboard offers a unique way to track and optimize real-time data, making use of already familiar tools and overlaying contextual information.

**Scale:** Cyzag provides the foundations that businesses need to drive sustainable CI, guaranteeing transparency and boosting collaboration. That makes benchmarking between sites and plants instant and easy.

Whiteboard enables people to work smarter and impact the decisions they make for the business, building an agile organization that identifies and solves issues timely.

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**ELEVATOR PITCH**

## Driven by Data

London-based UK start-up Cyzag developed Whiteboard as a simple, modern and user-friendly digital platform that reduces cost and waste by providing shopfloor workers and operations managers in the chemical manufacturing industry with live information at their fingertips. The team around founder and CEO John Papastylianou understands the value of data and how frustrating and expensive it can be when it's not accessed and analyzed fast enough to solve problems.

Whiteboard integrates real-time data from multiple sources into a single source of truth, enabling workers to quickly identify which parts of the process and equipment will likely contribute to production losses or overconsumption. The secure, cloud-based software platform empowers them to make informed decisions based on accurate data, and follow standard working processes, saving time, generating cost-efficiencies, reducing waste and driving sustainable business growth.

Identifying manufacturing quick wins can save up to €1 million a year. Legacy software can be eliminated or consolidated into the platform, saving up to €460,000 annually on license fees. The platform empowers employees at every level to derive real growth and value from their analytics.

### Milestones

**2012:**

- Cyzag incorporated

**2012-2015:**

- Manufacturing execution system (MES) consulting for General Electric, Land Rover, Qatar Steel and AkzoNobel

**2015-2018:**

- Manufacturing excellence (MX) consulting for Nouryon

**2018:**

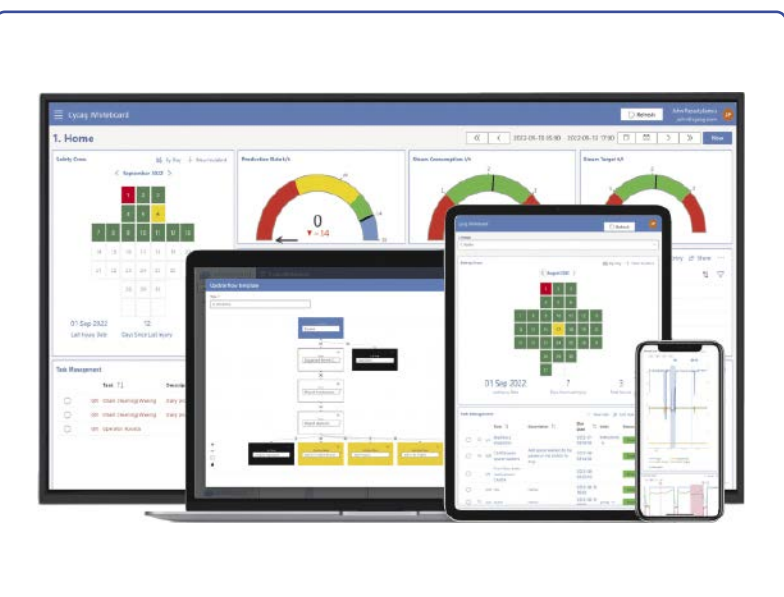
- Cyzag Whiteboard developed

**2018-2022:**

- Cyzag Whiteboard implemented in Nouryon, Nobian, Nefco and Perstorp

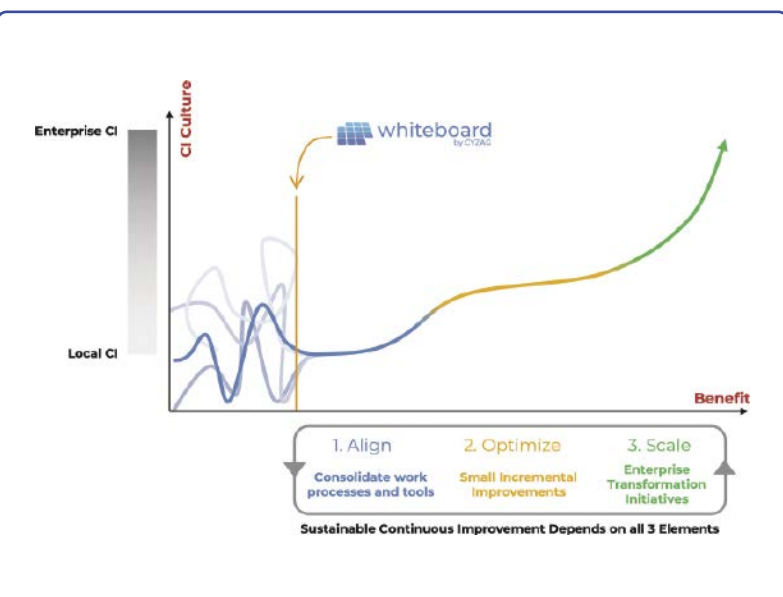
### Whiteboard key numbers

- Value delivery < 8 weeks
- Implemented at > 80 plants in 11 countries
- Demonstrated savings of €400 k/plant/year
- 2 hours saved/shift/plant
- 4-5 x increase in user engagement



Three steps — align, optimize and scale — support sustainable continuous improvement.

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Cyzag Whiteboard empowers workers in chemical manufacturing plants to make real-time decisions.

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