

# CASE STUDY

## Zeugma's IoT Platform Integration Increases Manufacturer's OEE by 33% in Just One Year



### About our Client Partner /

Our client is one food processing and packaging company that manufactures and distributes safe, innovative, and environmentally conscious products worldwide.

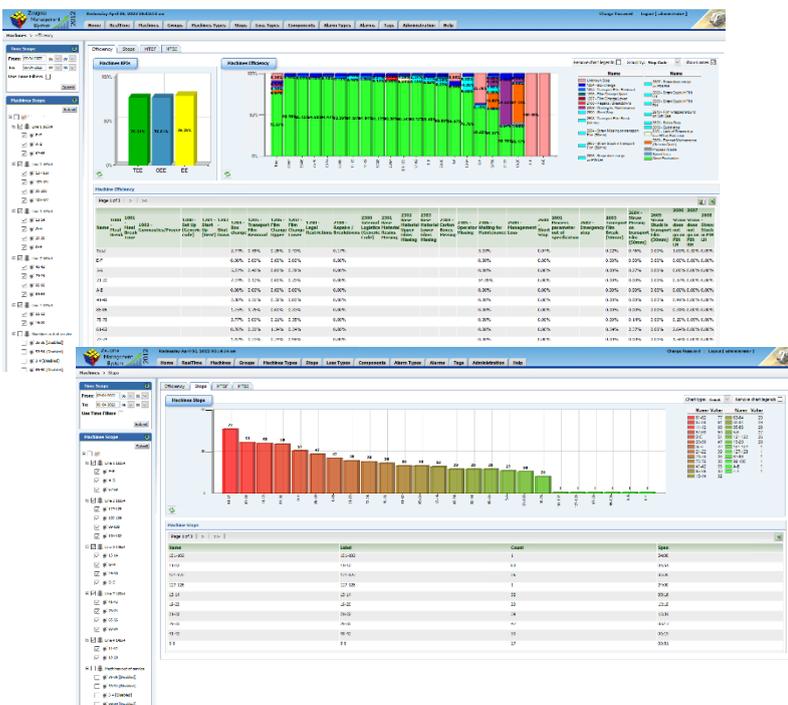
The focus on sustainability leads this client to take different approaches to conducting business in an industry crowded with old-school methods and technology.

### The Challenge /

Since our client puts great emphasis on sustainably running their business, they're always looking for innovative ways to optimize their manufacturing processes to be more efficient and less harmful to the environment.

When this client approached our team at Zeugma, they challenged us to devise a clever, new strategy to improve their systematic manufacturing data collection efforts. They wanted a system that would allow them to collect significant quantities of operational data, automatically analyze that data, and provide them insights about the efficiency — or lack thereof — of their straw production units.

A part of our client's worldwide factories was already running at higher efficiencies, but others desperately needed maintenance and an upgrade. Our strategy was to implement the custom-tailored Zeugma solutions at one of their factories as a test site, then expand to other relevant factories also needing updates down the road.



## The Solution /

The Zeugma team developed the ZMS2012 – Zeugma Manufacturing Software, an internet of things (IoT) platform to address our client's challenges. We offer extensive expertise working with large industrial organizations like this client, so we understand Total Productive Management (TPM) principles and know what it takes to run an efficient operation. Our idea behind the ZMS2012 was to make the whole platform work towards addressing the needs of production, maintenance, and TPM process managers to make their lives at work more manageable.

Here's how we planned to use the ZMS2012 software platform to improve our client's business:



### **Collect and Aggregate Operational Data /**

Our system had the capacity to collect large sets of operational data from individual machines in real-time.



### **Calculate Performance Indicators /**

We planned to use this data to calculate several performance metrics and indicators such as machine OEE and TEEP, or maintenance indicators like MTBF.



### **Access to Critical Information /**

Users on our client's teams would be given analytics data such as the number of losses by category, replaced components, and triggered alarms.



### **Streamlined Production Scheduling /**

Rather than using paper and excel spreadsheets to keep production schedules on track, we wanted to automate the process.



### **Cloud-Based Communication and Server Hosting /**

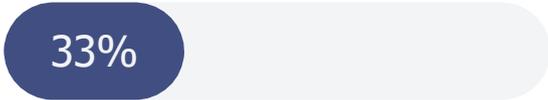
We hosted their platform server on a private cloud to keep things secure, and users could access everything through a front-end portal. Depending on security permissions, individuals could access several data screens at any given time to retrieve relevant information.

Since our client's hardware was outdated and not prepared to be interconnected with our platform, we had to physically install data acquisition system hardware at each site to collect operational data for the ZMS2012 servers. Once connected, the results were fantastic — take a look.

## Achievements /

By deploying the ZMS2012 IOT platform in just one factory location, our client instantly got a clearer picture of its process inefficiencies that were impacting their bottom line. By continuously monitoring the real-time data and insights provided by ZMS2012, our client successfully applied the TPM philosophy to their business over time. All the production scheduling and TAG management was migrated over to the platform, enabling their systems to deliver more information and be easier to keep organized.

As a result of our partnership and system integrations, we were able to:



Increase OEE — the most relevant indicator for production — by **33%** during just the first year alone



Expand our system integrations to **SIX new factory locations**

**150**

of our client's machines monitored using **ZMS2012** worldwide

## Want to Learn More /

**Are you interested in addressing your own company's production challenges?**

Get in touch with the Zeugma team to see how our industry-leading technology can help identify inefficiencies in your manufacturing and distribution processes.

## About Zeugma /

Zeugma is an industry-leading OEM that supplies customized, innovative industrial solutions to clients globally, namely industrial machinery, equipment, systems, and services. With extensive automation, process control, robotics, and mechanical engineering expertise, Zeugma provides speed and flexibility trusted by many critical industries.

