

# Industrial Analytics Transforms CP Kelco to Face the Future

Learn how a deeper insight into their operational performance through self-service industrial analytics helped CP Kelco to reduce process deviations, resulting in yearly potential savings of over \$1m.



CUSTOMER  
SUCCESS  
STORY

**CP KELCO**, part of J.M. Huber Corporation, is a leading producer of speciality hydrocolloids with offices and facilities across the globe. In this success story, Norman Ridgley, Senior Manager Operational Excellence at CP Kelco, discusses how TrendMiner's self-service industrial analytics on top of OSIsoft PI helps their production facility to gain deeper insight into their operational performance.

TrendMiner proved to be a key support tool which helped CP Kelco to find deviations within their production process. By implementing TrendMiner on top of OSIsoft PI, it became much easier to analyse and monitor their production process. Through various analytics use cases, CP Kelco could reduce the use of raw materials, implement energy savings, and produce more efficient with better control of quality, ultimately leading to potential yearly savings of \$1 million.

## THE JOURNEY

### IMPROVING THROUGHPUT, QUALITY AND OPERATING COSTS

CP Kelco is a leading producer of speciality hydrocolloids, which are used as a water-based thickener or stabilizer in a large variety of products. Featuring an extensive range of specialty hydrocolloid solutions, CP Kelco leverages its capabilities to bring concepts and ideas to real-world products in a broad range of applications.

Senior Manager Operational Excellence, Norman Ridgley was looking for a way to advance their usage of plant data. Receiving more insights into their data would enable CP Kelco to improve throughput and quality while lowering operating costs. To reach this goal, Norman Ridgley wanted to start using advanced data analytics tools that could merge with other data sources on all sites.



**Norman  
Ridgley**

Senior Manager  
Operational Excellence

Norman Ridgley is already working for over 19 years at CP Kelco, part of J.M. Huber Corporation, currently in the role as senior manager Operational Excellence. In this role, Norman provide support globally for CP Kelco plant operations located in China, US, Brazil and Europe. Support includes OEE, SAP for manufacturing, process data analysis, six-sigma, and electronic operational dashboards. Norman holds Bachelor of Science degree for Chemical Engineering from the Oklahoma State University.

The first steps in exploiting the data assets, captured in their OSIsoft PI operational intelligence system, were taken by the subject matter experts at the Okmulgee site in the US. They chose TrendMiner as a selfservice industrial analytics solution to analyse and monitor operational performance. Due to the openness of the OSIsoft PI system, there was no need for data migration to start working with TrendMiner. Based on the plug-and-play architecture, the results and enthusiasm of the users, CP Kelco decided to expand the scope of the usage of TrendMiner.

#### BUSINESS CHALLENGES

## USING OPERATIONAL DATA TO ITS FULL ADVANTAGE

At an internal, global meeting where key representatives of each site were present, the topic of improving operational performance through advanced data analytics was brought forward. At that time, all CP Kelco sites were working with basic OSIsoft PI systems, which collected raw data. However, without any alignment in the configuration of the systems, CP Kelco was not able to leverage the full potential of the sensor generated data stored in the OSIsoft PI system.



After the internal, global meeting at their headquarters, CP Kelco decided the following actions had to be taken to get more value from their time-series data:

### 1. Create data relationships at the process and batch level

In order to optimally use the data already available in the PI systems, Norman Ridgley decided to use OSIsoft Asset Framework (AF) to facilitate asset related process analysis through analytics, events, and notifications. “On top of that, we were looking for the best way to analyze the data and draw conclusions from it,” Norman Ridgley explains. “TrendMiner turned out to be the key support tool in picking up the data quickly and analyzing it. TrendMiner’s self-service analytics helped us to create the data relationships that we needed to link the information together and find deviations within our process.”

### 2. Identify tools for visualizing, trending, and analysis

Another top priority was defining the right big data tools for further insight into the data. “After creating the right data relationships, we started defining big data analytics tools, so we could start visualizing, trending and further analyzing the data,” Norman Ridgley explains.



In line with that goal, Norman and his team decided to use TrendMiner for process data analysis, to validate their calculations, to review potential KPIs, to track individual tank performance and to fingerprint batch deviations.

## DEEPER INSIGHTS INTO OPERATIONAL PERFORMANCE WITH SELF-SERVICE ANALYTICS

TrendMiner's self-service industrial analytics turned out to be a key support tool for CP Kelco which helps them to find deviations within their processes. By implementing TrendMiner, it became much easier for the production facility of CP Kelco to gain deeper insights into their operational performance and see where improvement is critical.

### 1. Deeper insights into operational performance

TrendMiner helped CP Kelco to visualize and draw conclusions from their time-series data. It helped them to perform root-cause analysis without complex data modelling

techniques to assess what causes deviations against best operational performance. TrendMiner provides various capabilities, among which Overlays (multiple time periods with similar patterns in process behaviour) for determining and analyzing operational deviations and performing batch controls to truly see what's going on. With that knowledge, TrendMiner enabled CP Kelco to create Fingerprints to monitor and further validate the deviations in their processes and to determine whether or not these deviations were repeating.

**"TrendMiner had the functionality and usability that we needed. It's very menu-driven and simple for the engineers to pick it up."**

**Norman Ridgley**  
Chief Digital Officer at CP Kelco

### 2. Analyze based on exceptions to drive simplicity

Norman and his team of representatives decided they would get the most value out of analyzing their data based on exceptions. "We would like to see the issues that arise during the process. We don't want to see normal operations," Norman Ridgley explains. Researching all situations that deviate from standard operational practice with self-service analytics helps CP Kelco to make meaningful improvements that have the largest impact on their operational performance.



### 3. Promote organic growth across sites sharing successes

Norman Ridgley wants to promote the use of advanced industrial analytics further in their organization. In order to maximize the utilization of data, the team decided that their process engineers needed to be trained properly. "We wanted this to be internal within the company so that we develop our own expertise on how to work with TrendMiner," Norman Ridgley explains.

#### BENEFITS

## IMPROVED CROSS-SITE DATA USAGE AND OPERATIONAL EFFICIENCY

Implementing TrendMiner's self-service industrial analytics on top of their current OSIsoft PI data system, helped CP Kelco to transform their business and get all its sites ready for the future. Through various analytics use cases, CP Kelco could reduce the use of raw materials, implement energy savings and produce more efficient with better control of quality. Daily use of TrendMiner is still increasing, to further meeting their operational goals.

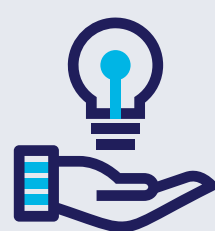
With the help of TrendMiner, CP Kelco advanced in the use of process data across their sites and improved operational efficiency numbers by significantly reducing process deviations. At this point in their optimization project, CP Kelco is on track on reaching one million dollar savings per year.

**"TrendMiner was a key support tool in identifying deviations within our process."**

**Norman Ridgley**  
Chief Digital Officer at CP Kelco

TrendMiner's capabilities to identify deviations in CP Kelco's processes helps to:

- Validate if deviations are repeating and determine their degree of impact
- Determine operational deviations in the batch control system through Fingerprinting and Overlays
- Support capital engineering projects in order to solve operational issues



## WHAT DOES A SELF-SERVICE ANALYTICS PROJECT WITH TRENDMINER LOOK LIKE?

Structuring your self-service analytics project well is essential for a successful outcome and gaining business value. To make sure you make the most out of your self-service analytics project, at TrendMiner we always use three essential building blocks.

**Curious what self-service industrial analytics with TrendMiner looks like?**

[DOWNLOAD E-BOOK](#)

**Want to see TrendMiner in practice? Then it's time to request a demo:**

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