Perstorp
WINNING FORMULAS

Perstorp Develops KPI Production Portal to Focus Organization on Meeting Plant Production Targets

aspentech | Case Study

Perstorp achieved faster problem resolution and a higher asset utilization rate.

CHALLENGE

Perstorp wanted visually understand in near real time how well their plants were meeting production goals relative to targets.

SOLUTION

Aspen Calc and Aspen SQLplus to develop underlying KPI calculations, leverage Microsoft SharePoint as portal technology to create displays that succinctly show actual production vs. target performance.

BENEFITS

- Faster problem resolution
- Higher asset utilization rate
- Monitoring of equipment based on equipment condition

Perstorp is a global leader in several sectors of the specialty chemicals market. Their primary products are additives for paints and coatings, lasticizers, solvents, lubricants, bleach chemicals and oil-drilling applications. In addition, they also produce feed additives and biodiesel.

Aspen InfoPlus.21® has been used globally by Perstorp since 2006 and is one of the five largest IT applications in the company. They have nine Aspen InfoPlus.21 servers covering 40 plants with 50,000 tags, a total of 500 users and four Aspen Production Record Manager installations.

Perstorp built the key performance indicator (KPI) production portal application using standard Aspen InfoPlus.21®tools — Aspen Calc and Aspen SQLplus — along with Microsoft® SharePoint as the portal. The visual displays built, showing the performance of all their plants, were impressive. At a glance, users can see current performance levels and possible areas for improvement.

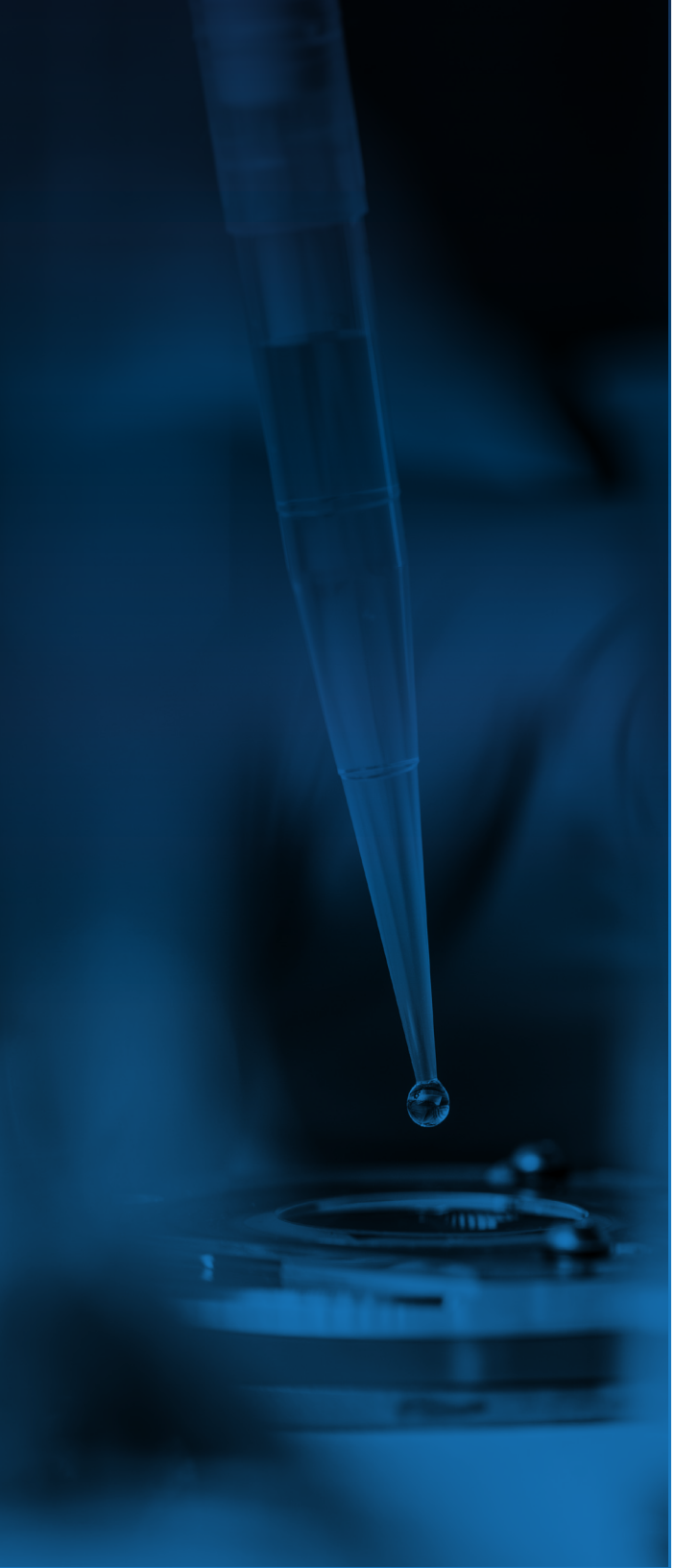
The KPI production portal is displayed in conference and meeting rooms at each of the plants to create awareness and focus employees on the importance of meeting production goals. Daily meetings are started using the daily production indicators, which display colors that quickly visualize each plant's production performance.

The Need for a Production Portal

KPIs play an important role in virtually all process plant environments. Perstorp developed a production portal to be able to facilitate the display of production KPIs and more. Not only does the production portal deliver important production KPIs, such as "Loss vs. Plan", it allows the user to analyze production results in more detail.

Ancillary features of their implementation included automated emails and/or phone text messages that could be triggered either by events, such as plant shutdowns, or time-based (e.g. weekly reporting), which could be used for automatic ordering of some raw materials and predictive maintenance.

Large specialty chemical leader develops advanced KPI production portal tool using Aspen InfoPlus.21® tools, building upon their extensive Aspen InfoPlus.21 installation.



Solution Overview

The portal was developed so that it could be visualized with an internet browser that displays updates every five minutes. Building on their extensive Aspen InfoPlus.21 installation, Perstorp developed the portal using Aspen Calc and Aspen SQLplus to create event-based queries with Microsoft SharePoint as the portal technology. Using those tools, Perstorp developed the calculations and queries, and then designed graphical snapshots for displaying the KPIs. Perstorp defined a number of KPIs, such as daily plant production, Plant Utilization Rate, Loss vs. Plan, Steam Consumption, and an Aspen InfoPlus.21 server status as their main KPIs that were routinely monitored.

Driving Continuous Improvments

Perstorp has experienced a number of key benefits as a result of the new KPI management portal. The most important is that high-level snapshots based on defined target performance levels help drive continuous improvement throughout the organization, fostering greater cross-functional collaboration with near real-time access to the current health of plant operations.

At a glance, users are able to see current performance levels and possible areas for improvement. Drill-down functionality enables users to investigate and uncover the root cause of any dips in performance, enabling corrective action to be taken sooner rather than later and thereby minimizing upset conditions.monitored.

Benefits

The utilization rate of Perstorp's assets has improved. Condition-based maintenance now actively maintains equipment based on its condition, rather than a time schedule. Interactive web reports count how many cycles each on-off valve has made between two given dates and can also count how many hours each motor has been running. This enables Perstorp to proactively monitor their equipment and minimize shutdowns

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