





How PRISM® provided a production facility with asset level insights.

Cloud worked alongside Krispy Kreme to install Mindsett PRISM®, their unique IoT asset-level monitoring device, at a production facility in Tipton, UK. The aim was to provide insight into energy consumption and move towards predictive maintenance for Krispy Kreme's facilities.











Since opening their first UK store in 2003, Krispy Kreme have expanded to over 170 UK stores and more than 1,000 cabinets in their retail partner outlets. At it's peak the US donut giant was selling over a million donuts per week across its UK outlets.

In 2019 Krispy Kreme engaged with the Cloudfm Group to maintain their sites and provide technology that would ensure their teams had time to spend with customers, not solving problems.

As part of their ongoing commitment to understanding their energy consumption and gaining insight into their assets, a Krispy Kreme production facility in Tipton engaged with the group to trial the Mindsett platform and the IoT asset-level monitoring device – Mindsett PRISM® – Prior to this, the facility at Tipton had no in-depth energy information on their assets and could not accurately assess the performance of individual assets.

SOLUTION

To help Krispy Kreme see what was really happening at their production facility our Cloud team installed 3 Mindsett PRISM® devices at the Tipton site. This enabled us to monitor over 85 assets across 14 separate categories. This included 5 Krispy Kreme production lines, turning out over 170,000 donuts per week.

OUTCOME

As a result of installing Mindsett PRISM® devices at Tipton, there were several key outcomes, including:

- Gaining full visibility of each asset's energy consumption.
 With this information teams at the Tipton site can actively work towards reducing their consumption, in turn reducing their carbon emissions.
- The introduction of immediate, real-time alerting when an asset is switched on or off. This ensures that in the event of a technical fault that moved the asset to the off position, teams can act quickly.
- 24/7 performance monitoring. The Cloud team were able to provide Krispy Kreme with a harmonic view of each asset. These views illustrate data points that indicate a fault in an asset prior to it happening, which means the team at Krispy Kreme Tipton can take proactive maintenance measures.
- Just one figure to identify asset health. With data collected on assets over the course of a year the Mindsett data team can provide a starting benchmark for asset health, which is then compared to ongoing performance. This one figure is known as the Mindsett ligure is known as the Mindsett as a percentage. 100% representing operationally perfect.

Using the Mindsett Index Score, enables teams to make quick decisions involving capital spend. For example, one Krispy Kreme production line, showed an asset with a score of almost 92% in February 2022, that had deteriorated to under 53% by January of 2023. As all other assets were performing as they should, spend could be directed to either replace or perform maintenance on this asset.

SUMMARY

Prior to engaging with Cloud's Mindsett platform, Krispy Kreme had no indepth insight into the assets at their production facility. After installing the unique lot technology, they can now see real-time energy consumption right down to the asset and are on the road to predictive maintenance.



Mindsett utilises PRISM® at the Cloudfm Group head office to reduce their carbon footprint.

The Mindsett team used a combination of behavioural coaching and detailed reporting to influence a change in energy-saving behaviours across the organisation.











During the Covid-19 pandemic, staff across the UK adapted to working from home where possible. The team at Cloudfm in Colchester was no different and their almost 150-strong staff moved to working remotely.

The pandemic sparked a change for Cloud, and as the work from home order was lifted, the team were offered the option to work remotely if they wished. This shift in working patterns has also brought with it a change in energy consumption patterns. While a significant number of colleagues opt to attend the office, occupation numbers vary considerably, from day to day.

With varying levels of energy consumption, it became increasingly important for building managers to find a way to understand and manage their energy usage.

CHALLENGES

One of the key challenges facing building managers was the lack of visibility about which assets were consuming energy and when. Without this level of understanding, it was difficult to construct a plan to reduce usage. And changing colleague behaviours towards energy, can be challenging.

Managers faced another hurdle when it came to implementing a realistic energy reduction strategy and reporting this progress to the board as part of Net Zero reporting.

OUTCOME

As a result of installing Mindsett Cloud's Mindsett PRISM® device was installed at the office's distribution board. The device's innovative design was able to pull data directly from the relevant assets and use this information to provide a detailed outline of which assets were the biggest offenders for energy consumption.

With Mindsett's data team's reporting, energy consumption was broken down to MWh at the asset level, to help understand potential areas of saving.

The Mindsett data reports also offered actionable insights. These insights have helped colleagues understand, for example, why certain asset classes are showing an increase in consumption and in turn, those observations have changed staff attitudes towards energy usage at the office.



BENEFITS

Cloudfm Group has seen significant benefits from the installing Mindsett PRISM®, including:

- A 30% reduction in energy consumption.
- 5 tonnes of CO2 saved over 9 months.
- Increased staff engagement when it comes to implementing energy saving behaviours.
- 40% reduction in energy consumption from kitchen equipment.





How PRISM® provided a restaurant with insights resulting in significant energy savings.

Mindsett worked closely with Zizzi in Bluewater, part of the Azzurri Group, to install PRISM®. This was them the aim of providing them with asset level insights, advising them on energy saving behaviors, and enabling behavioral change.







The Azzurri Group is one of the UK's largest and most successful casual dining businesses. They employ nearly 5,500 people, serving over 13 million meals annually in their growing estate of over 200 restaurants and shops.

The group has been a long-time client of Cloudfm Group and engaged with the IoT technology in 2021. What was originally a trial has since progressed to a full-scale partnership, with visibility and ROI front of mind.

Prior to engaging with the Cloud team, Azzurri had little to no visibility over the assets, their performance, or energy consumption. Installing PRISM® was a key step in the group taking control of their usage, getting employees to engage in energy saving behaviors, and being able to accurately report on the ROI of projects relating to asset data.



SOLUTION

To help the team at Zizzi Bluewater better understand their consumption the team at Cloud installed Mindsett PRISM® devices at their site. They were also provided with regular reporting on their assets and consumption in the form of reports and dashboards.

This site's kWh consumption was significantly higher than other similar sized Zizzi sites and we were keen to find out why and help to reduce it.



OUTCOME

As a result of installing Mindsett PRISM® devices at the Bluewater restaurant, there were several key outcomes, including:

- The introduction of asset-level energy consumption data. In addition to consumption per asset being outlined in kWh, the site teams were also able to see how much this was costing them in £ and carbon tonnes.
- Consultation and advice on how to interpret the data from the dashboards and reports and implement action in a meaningful way.

Data gathered by PRISM® showed that Bluewater's energy consumption was significantly higher than other restaurants in the group of a similar size. Thanks to the asset-level energy intelligence, it was found that this was due to the site air conditioning unit being left running out of hours.

Prior to having this knowledge, the Zizzi Bluewater location was consuming on average per week 4.130 kWh on AC alone. This was with an average external temperature of 8 degrees celsius. At the time of this project this was costing approx £702 per week

Having isolated the offending asset. the team at Bluewater made a united effort to shut off the AC at the close of day and managed to reduce consumption on that single asset by 2,485 kWh per week to just 1,645 kWh. This is a saving per week of £422. Combined with the fact, that by this time, the average external temperature had risen to 12 degrees Celsius, meaning the unit was having to work harder in the time it was switched on

SUMMARY

Prior to installing Mindsett PRISM®. Zizzi at Bluewater had no in-depth understanding of their energy consumption. After installing the devices, they reduced their AC spend even as temperatures rose.





How PRISM® is paving the way for a popular casino group to achieve stretching ESG goals



Cloud's exciting new partnership with the Rank Group, owners of Mecca Bingo and Grosvenor Casinos, to overhaul their sites' asset portfolio and help reduce their carbon consumption.





Rank has been entertaining Britain since 1937 through its gaming-based entertainment brands. It is the only operator offering customers both venue and digital bingo and casino experiences in the UK. Its branded venues and digital channels include Grosvenor Casinos and grosvenorcasinos. com, Mecca and meccabingo.com.

Grosvenor is the UK's largest multi-channel casino operator (by venues) with 51 venues and Mecca is the second largest bingo operator in Great Britain (by venues) with 56 venues.

Over the next three years our team at Cloud will deploy Mindsett PRISM®, and its energy management technology, across Rank Group's sites. We will also deliver asset monitoring and data consultancy to help minimise energy consumption and maximise carbon reduction.



SOLUTION

Cloud has initially installed over 600 PRISM® devices across 40 Rank sites, with a phased roll-out plan their full estate over time.

We're providing bespoke reporting, dashboards, and a mobile app that will help the teams at Mecca and Grosvenor take ownership of their consumption and enable positive behavioural change.



EXPECTED OUTCOMES AND BENEFITS

Cloud and Rank have agreed a set out outcomes to reach over the coming years, these include:

- loint energy reduction targets across all sites which will amount to a saving of £5.1 million in electricity costs and an 12% reduction in run rate.
- A return on investment in just 18 months with a 204% ROI in five years.
- The provision of dashboards and an energy management app for all key staff at each site, expanded to include oil and gas consumption in addition to electricity.
- 12.000 assets will be connected to Mindsett PRISM® devices in Phase 1, allowing us to collect over 10 billion data points annually. These data points enable the team at Cloud to deliver the Mindsett Index and Mindsett Rainbow four predictive maintenance programme - see pages 2 -5).
- . Within 6-12 months of installation Mindsett will introduce the Mindsett Index and Mindsett Rainbow modules, both contributing to a reduction in capital replacements, non-trading events, and planned maintenance costs.



A NOTE FROM THE RANK GROUP

"We set out some ambitious goals in our latest ESG report with the aim to invest in efficient and responsible operations to reduce our impact on the environment. Our new partnership with Cloud will help us accelerate our carbon reduction plans across our estate.

Cloud has developed some great technology that gives a granular view of energy use in realtime and a framework to be able to use that information to change behaviours that will benefit the environment."

Hatt Austin -Group Property Director- The Rank Group

