

Transforming refrigeration asset management with data-driven insights

1 year ago



At [Arcus FM](#), technology and innovation are central to our service delivery, particularly in refrigeration asset management. Our Capital Planning Tool (CaPT) exemplifies this commitment, offering data-driven solutions to help businesses manage their refrigeration systems more effectively. JB, our Product Development Manager, shares how CaPT is shaping smarter decision-making and improving operational efficiency for our customers.

As the Product Development Manager at Arcus, my role focuses on creating tools that add measurable value for our customers. Refrigeration asset management is an area where we see tangible benefits from advanced technology and data analytics. CaPT enables businesses to monitor refrigeration asset health in real-time, allowing them to make informed decisions on maintenance, repairs, and replacements.

SMARTER DECISION-MAKING THROUGH PREDICTIVE ANALYTICS

CaPT's power lies in its ability to leverage both historical and real-time data to forecast asset performance. Refrigeration systems often operate in demanding environments, making continuous monitoring essential to avoid unexpected failures.

CaPT applies a clustering algorithm (K-nearest neighbour - KNN) to compare assets with similar operational parameters, such as proximity to the coast, store size, and trade intensity. This allows businesses to identify performance trends, pinpoint potential risks, and take pre-emptive action. For companies managing a large portfolio of sites, these insights ensure a consistent, efficient approach to refrigeration maintenance.

The tool's forecasting capabilities help businesses plan capital investment more effectively. Refrigeration

accounts for a significant portion of energy consumption, making strategic replacements and upgrades essential for cost control and sustainability.

SIMPLIFYING COMPLEXITY FOR EFFECTIVE REFRIGERATION MANAGEMENT

While refrigeration asset management is technically demanding, CaPT makes it accessible. We've designed the platform with an intuitive interface that provides actionable insights at a glance. Whether tracking daily performance or planning long-term investments, customers can quickly identify patterns, prioritise interventions, and minimise disruption to operations.

Sustainability is at the core of CaPT's value. Refrigeration systems contribute significantly to energy usage and carbon emissions, so identifying opportunities to reduce energy consumption and extend asset lifespans supports both cost savings and environmental objectives.

For example, CaPT features a customisable league table that allows businesses to focus on key performance indicators, such as energy usage, deviations from baselines, or worst-performing assets. By integrating sustainability metrics, customers can make informed decisions that drive both operational efficiency and environmental impact reduction.

PROACTIVE MAINTENANCE TO REDUCE DOWNTIME & COSTS

Planned Preventative Maintenance (PPM) is seamlessly integrated within CaPT, ensuring refrigeration assets operate at peak efficiency for as long as possible. Instead of reactive repairs, businesses can use data-driven insights to schedule maintenance strategically, reducing unnecessary servicing while extending asset lifespan.

This proactive approach minimises downtime and reduces the environmental impact of refrigeration operations. Fewer system faults, optimised performance, and fewer engineer visits all contribute to lower carbon emissions, reduced energy consumption, and long-term cost savings.

DRIVING SMARTER, MORE EFFICIENT OPERATIONS

At Arcus, innovation isn't just about technology – it's about delivering real-world value to our customers. CaPT is transforming refrigeration asset management, helping businesses optimise maintenance strategies, extend asset life, and improve energy efficiency.

By embedding data-driven insights into our service delivery, we ensure our customers' estates remain efficient, compliant, and cost-effective.

Want to learn more about how Arcus FM's refrigeration services can support your business? [Get in touch with our team today.](#)