



16%
reduction in
electricity

<4
months
ROI

Case study: Superdry

Background

Superdry is an exciting contemporary brand which focuses on high-quality products that fuse vintage Americana and Japanese-inspired graphics with a British style. There are 139 owned stores across the UK and mainland Europe, 208 franchised and licensed stores, and 168 concessions and with such a retail portfolio comes the challenges of managing energy consumption and spend.

Challenge

Optimised Buildings were commissioned to reduce the energy consumption by 10% in 10 of the Superdry stores throughout the UK over a 6 month period. Each of the 10 stores had the latest BeMS (Building Energy Management System) already installed, with remote access. Each store has its main incoming electricity supply metered, along with HVAC sub-meters on the majority.

It soon became clear that although latest technology had been adopted, these stores still weren't running as efficiently as they could be and there was an opportunity to 'optimise' the operation of the HVAC (Heating, Ventilation and Air Conditioning) and Lighting within the stores.

Quick facts

73 stores in the optimisation program

16% reduction in electricity consumption

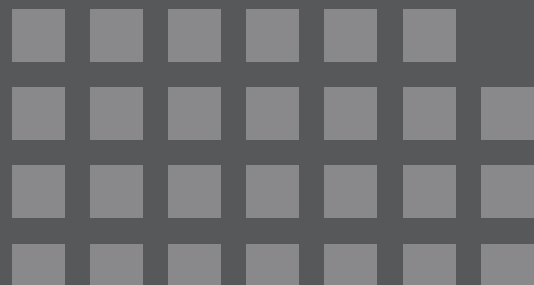
All savings achieved through optimisation of HVAC & BeMS

AC Optimised with heating and lighting systems

£117,811 savings in 2018

ROI of just 4 months

See the solution overleaf



Solution

The first objective was to monitor the energy being consumed through the metering that was installed into each store. These meters were already available which negated any integration requirements, this half hourly data was logged and 'pushed' to our cloud-based 'Optimised aM&T' (automatic Monitoring and Targeting) software. This created the transparency and baseline data to effectively monitor and measure the impact of the building optimisation deployed.

The second objective was to implement the 'Optimised Analytics' platform to monitor the BeMS and HVAC systems through intelligent algorithms and rules. This cloud-based platform tracks the performance of assets, equipment and systems and quickly identifies anomalies in plant operation saving energy and maintenance costs.

Once the above systems were in place the task of optimising the assets began. This started with analysing the base line data and energy profiles for each store, in particular, identifying energy usage outside of store trading times. Aligning time schedules to match trading times, operating at suitable temperatures during trading periods without affecting store conditions, correct use of override switches, and ensuring heating and cooling systems were not operating at the same time (fighting against each other).

Group	Rules	cost	dur	Timeliness	Targets
Bath 466 6 sparks	Lights ON and Unoccupied	£0.28	30min	Mon 17th, Wed 19th, Fri 21st, Sun 23rd	Sales Lighting
Belfast 524 12 sparks	AC ON and Unoccupied	£2.61	4.75hr	Mon 17th, Wed 19th, Fri 21st, Sun 23rd	Sales AC Enable
	Lights ON and Unoccupied	£2.11	3.83hr	Mon 17th, Wed 19th, Fri 21st, Sun 23rd	Sales Lighting
Bradford 555 28 sparks	AC ON and Unoccupied	£0.23	25min	Mon 17th, Wed 19th, Fri 21st, Sun 23rd	Sales AC Enable
	Lights ON and Unoccupied	£11.82	21.5hr	Mon 17th, Wed 19th, Fri 21st, Sun 23rd	Sales Lighting
	Override Pressed Outside of Occupancy	21.11hr		Mon 17th, Wed 19th, Fri 21st, Sun 23rd	Override
	Sensor Failure	24hr		Mon 17th, Wed 19th, Fri 21st, Sun 23rd	Stock Temp
	Signage Lights ON and Unoccupied (Mail)	105.83hr		Mon 17th, Wed 19th, Fri 21st, Sun 23rd	(Z)
Bull Ring 404 6 sparks	Lights ON and Unoccupied	£11.13	20.23hr	Mon 17th, Wed 19th, Fri 21st, Sun 23rd	Sales Lighting
Cambridge 477 31 sparks	AC ON and Unoccupied	£0.99	1.8hr	Mon 17th, Wed 19th, Fri 21st, Sun 23rd	(Z)
	Doorheatsw	107hr		Mon 17th, Wed 19th, Fri 21st, Sun 23rd	HVAC
	Lights ON and Unoccupied	£1.97	3.58hr	Mon 17th, Wed 19th, Fri 21st, Sun 23rd	Sales Lighting
	Signage Lights On and Unoccupied (Mail)	18.32hr		Mon 17th, Wed 19th, Fri 21st, Sun 23rd	Signage Lighting

Once these areas were addressed, the 'Optimised Bureau' managed service remotely monitored the performance of each stores HVAC, BeMS and lighting circuits to ensure continuous operational efficiency.

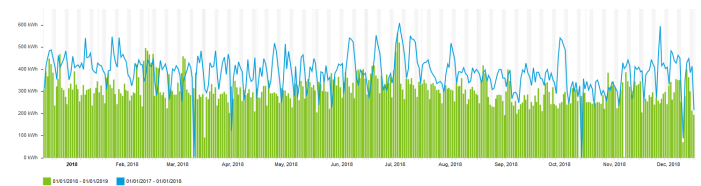
The Optimised Bureau is now providing continuous monitoring on behalf of Supergroup to identify anomalies and generate reports, alerts and ongoing energy management recommendations.

Results

Since the various assets have been optimised and the new optimisation strategies have been implemented, significant savings have been realised.

Savings over 11.1% (10 Stores) were achieved in the first 6 months. This has resulted in another 16 stores being implemented on the Optimised Bureau, and a total of 18.2% (26 Stores) of savings have been achieved and now the whole UK portfolio (73 Stores) have now been added.

The net business impact is overall reduction on the electricity consumption of 16% through optimisation of existing assets and systems, with no requirement for additional controls to be installed.



Manchester Arndale Store

“Very interesting and innovative software and services, highlighting lots of issues I wasn't even aware of and was unlikely to be, without Optimised Buildings. Even stores that I thought were working efficiently had scope for further savings, very enlightening.”

Paul Thomas – Energy & Environment Manager
Supergroup PLC

Optimised Buildings Ltd
1 Ivanhoe Office Park, Ivanhoe Park Way
Ashby de la Zouch, Leicestershire LE65 2AB

Tel: 0333 370 2021
Email: info@optimisedbuildings.com

optimisedbuildings.com

© Optimised Buildings Ltd. All rights reserved

