Workshop 1d

Adoption of Renewable Heating - Resident Engagement

Speaker: Jayne Elliott, Switchee

Chaired by: Andrew Burke

Room: D

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Switchee Ecosystem

The Switchee ecosystem consists of the smart thermostat, heating control unit, sensors and the Switchee Insights dashboard.

GSM Data Transmission

Sensor data from Switchee (Temperature, Humidity, Air Pressure, Motion and Light) is transmitted via GSM, analysed and presented through live alerts and metrics on our dashboard.

Switchee API

Business Systems
Integration

Industry-Leading
Cloud Data Warehousing

Analytics and Live Alerts
Dashboard

Calculated Analysis

Stockport Homes - the project

Homes as Energy Systems (HaES)

Ground breaking collaborative across GM. Part funded by the European Regional Development Fund the project included installs over 700 energy efficient technologies such as ASHP, GSHP, PV and EWI.

The aim of the project is to prove that, if lots of energy efficient homes are able to create and store small amounts of electricity, they can together make a better, low carbon energy network while also providing costs saving and better thermal comfort to our customers

Switchee Devices

Stock Overview

106

Properties with Switchee installed

Mould Risk ⓘ

Properties at high risk of mould /damp:

39 %

(that's 41 properties)

Heat Stroke Risk ⓘ

Properties at high risk of heat stroke:

None!

(that's 0 properties)

Fuel Poverty ⓘ

Properties at high risk of fuel poverty:

25 %

(that's 27 properties)

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Challenges

Pandemic forced us to think differently about customer engagement

- Show flat by appointment only (when restrictions permitted)

- Posters and letter drops

- Site presence

- Use of video calling for advice/ demonstrations

- Instructional video and use of QR codes and online user guides

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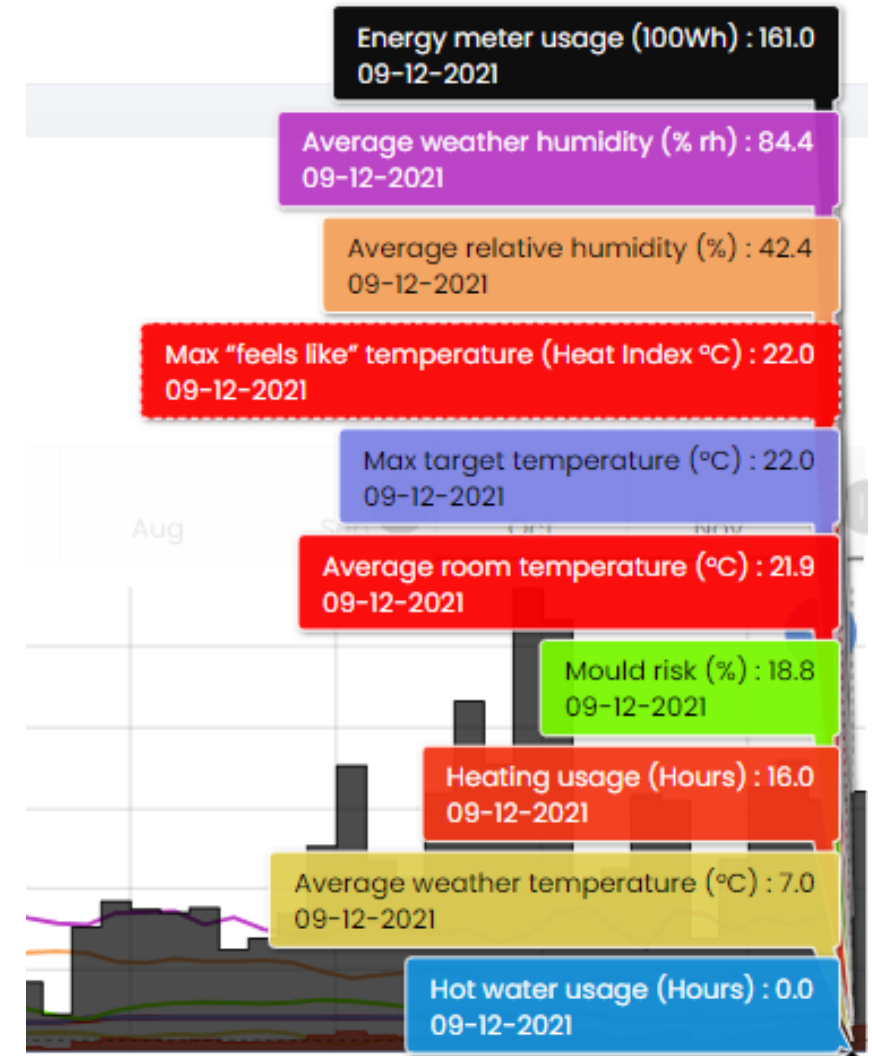National Housing Maintenance Forum

Spotlight on How Switchee Helps

- Tangible evidence for residents to answer concerns and queries on items such as running costs, temperature and usage.

- Evidence for AM teams and R&M teams to review and satisfy future business cases.

- Identifies issues and vulnerabilities and assists with fault finding. We have done previous schemes without such data and this has been an issue.

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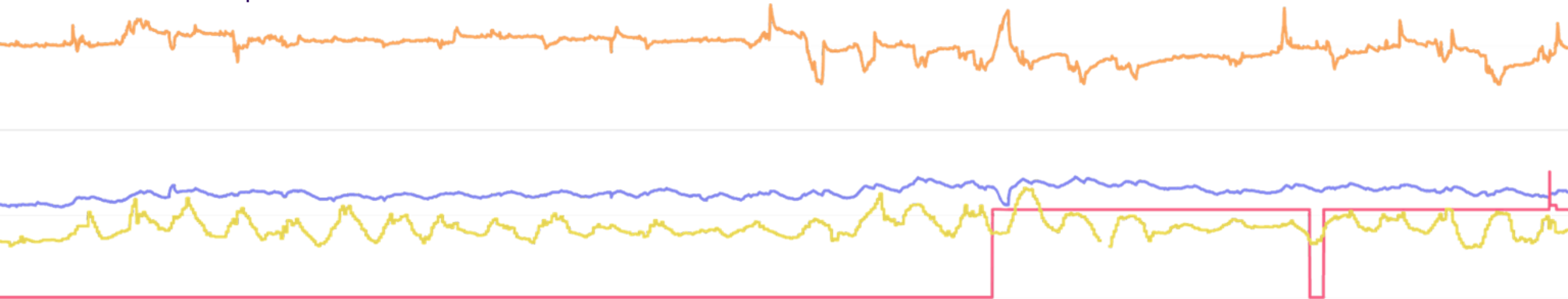
Real Data Insights Understanding what is happening

- Visualised data to see how people heat their homes.

- Switchee can connect 3rd party monitoring.

- Extremely useful to help with resident engagement.

Energy meter usage (100Wh) : 161.0
09-12-2021

Average weather humidity (% rh) : 84.4
09-12-2021

Average relative humidity (%) : 42.4
09-12-2021

Max "feels like" temperature (Heat Index °C) : 22.0
09-12-2021

Max target temperature (°C) : 22.0
09-12-2021

Average room temperature (°C) : 21.9
09-12-2021

Mould risk (%) : 18.8
09-12-2021

Heating usage (Hours) : 16.0
09-12-2021

Average weather temperature (°C) : 7.0
09-12-2021

Hot water usage (Hours) : 0.0
09-12-2021

Aug

Engaging with residents

- Visual representation when heating and hotwater is used helps to quickly answer questions.
- EXAMPLE - Hot Water set constantly in the summer was able to advise how much will have cost.
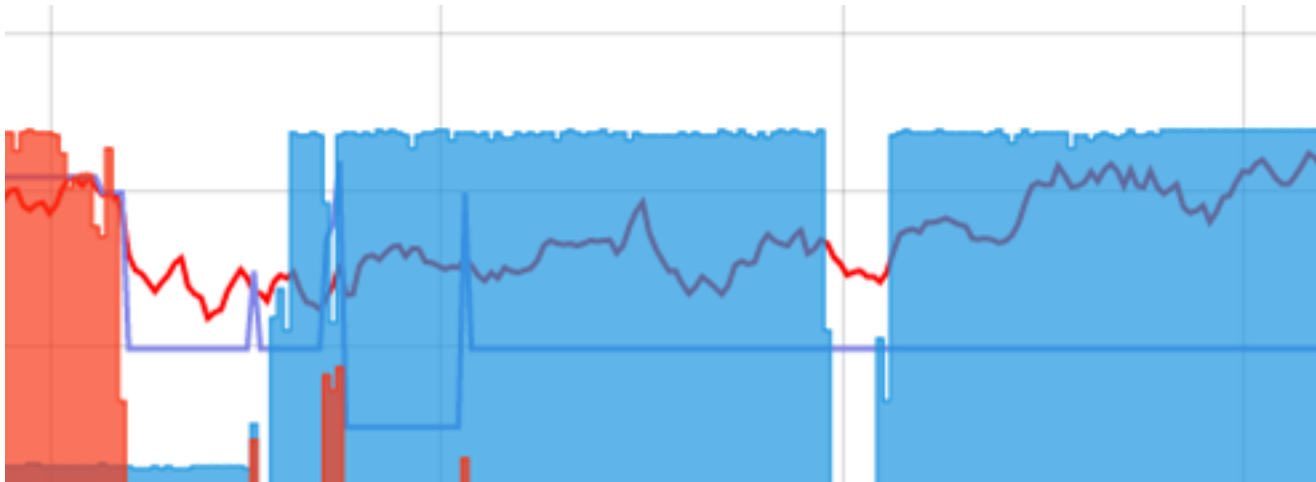
Status

📶	Last Sensor Reading	3 minutes ago
🌡️	Actual Temperature	20.5 ℃
🌡️	Target Temperature	5 ℃
💧	Relative Humidity	62.2 ℀
	Heating Mode	Manual
🛁	Hot Water Mode	Timer
💧	Mould Risk	Medium (59%)

Devices

Switchee (Gen2)
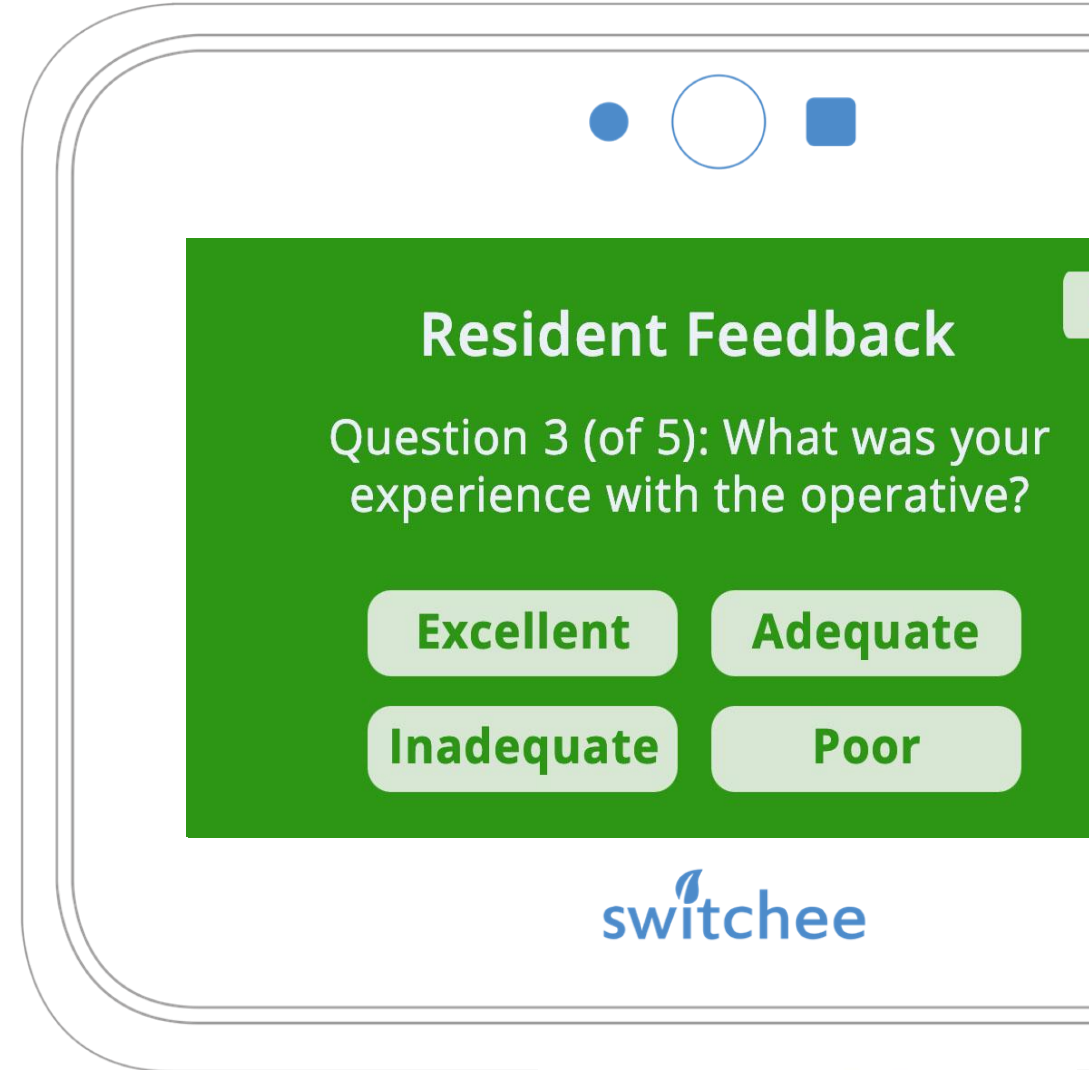3580140!

Sensor (MBus)
Electricity meter

Talk Directly With Residents - Digitally

- Switchee allows you to communicate with residents through its screen.

- Communication is handled through a GSM allowing you to communicate without WiFi.

- Use Switchee to announce new or important changes and request callbacks directly on a screen in a residents home.

90%

Switchee On-Unit Message
Engagement Rate

Resident Feedback

Question 3 (of 5): What was your experience with the operative?

| Excellent | Adequate |
| Inadequate | Poor |

switchee

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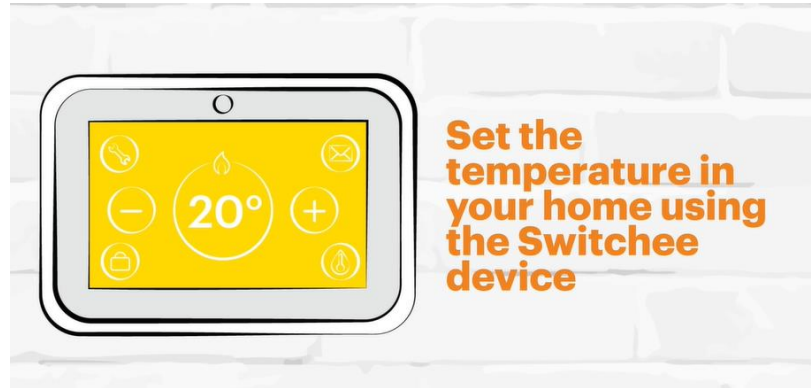nhmf National Housing Maintenance Forum

Success Outcomes

- Surveys – increased comfort levels and heating controllability

- Customer voice – felt listened to and engaged

- Increased Support channels - energy team, One number contact centre team, contractors (including Switchee), added ways to communicate, but not replaced human aspect.

- Online guide - QR code next to the heat meter - directs to the website guide

- Ongoing support - Energy team, Switchee

- Property Insights - CDM and Fuel Poverty Risk aid internal cross team working

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Add more ....

- Ongoing partnership working

- Muscle Memory - revert in winter to how always used heating

- Using what we've learnt from this project and others to improve on the next e.g.

  - Hot Water Demand v Heating

  - Noise difference (both location and sound difference)

  - User Guides

- Switchee heat pump profile (21' day, 18' night)

- Digital messaging - advice and surveys

Using Digital Methods - smartly

SCAN ME (switchee QR code)

Set the temperature in your home using the Switchee device

Core364 involved the removal of the gas supply from the block in which you live

CORE 364

02:56

stockport homes — Lancashire Hill Heating Controls Video
Copy link
Watch on YouTube

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"Engaging with our tenants is very important to us and the Switchee messaging service gives us a new, exciting way of offering information and support to help residents to afford to heat their homes."

Helen Langley

Senior Support Officer

"We have seen the benefits in the landlord dashboard data, which has helped us to identify customers who require support in changing the way they use their new heating system."

Asset Sustainability Manager

gentoo

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"We are using Switchee's data to understand the extent of fuel poverty in a variety of different types of homes and, with the NEA's help, proactively offering them help where it's most needed."

Leila Dottin,

Successful Tenancies,

Hyde

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"An investment with a payback period as short as 2 years is a no-brainer. For every £1 invested, Flagship makes a net £2 saving and we put £2 in the pocket of our resident. That is a very strong business case"

Dave Armstrong
Flagship CFO

Pilot - IoT project - connectivity, insight through sensors.

Operational Project - CDM, Customer Satisfaction, digital messaging, Remote boiler testing, appointment scheduling.

Rollout - **2,225 per year** through heating replacement programmes, voids, CDM triage, Appointment Scheduling

£7.3M
Saved in the next 10 years

20K
Switchee Units Being Installed

£1.8M
Resident Fuel Bill Savings Per Year