Smart Housing For Healthier Homes.

A cold, damp home is not just unpleasant. It can also be very bad for your health. As part of an innovative project in Cornwall, smart sensors and mathematical modelling are helping the local council make decisions based on real data in order to protect the health of its residents.

The Solution

Smartline is a collaborative research project exploring the relationships between people, technology and wellbeing in Cornwall.

The project aims to help Cornwall Council make data-driven decisions on policy, leading to new products, processes and services in smart housing and smart communities.

One of the programmes within the Smartline project focuses on modelling mould growth in 274 Cornwall homes run by a Housing Association.

Led by Dr Tamaryn Menneer, the programme uses the 'VTT model' – a robust mathematical model named after a research centre in Finland – to predict mould growth from relative humidity and temperature data, collected by Invisible Systems' intelligently connected sensors.

The Challenge

Mould in the home has long been recognised to have an adverse effect on health – causing respiratory infections, asthma and allergies. Despite awareness of the problem, an estimated 75% of all claims made by tenants to Housing Associations in the UK are still focused on mould and the environmental conditions that cause it.

Housing Associations across the country are looking for cost-effective solutions that will provide healthier homes for tenants, and reduce the spiralling expense of mould-related claims.

Did you know?

Damp affects 3% of UK homes. And it's thought that anywhere between 5% and 50% have

Beyond Housing

This kind of approach can be applied anywhere.

Our industry-leading I-System software solutions are already providing businesses like yours with useful, real-world insights on energy consumption and potential wastage – empowering them to maximise their efficiency and profitability, while reducing their environmental impact.

By connecting assets and devices, allowing them to share and analyse data, Invisible Systems can intelligently and automatically optimise your business.

Project Outcomes

Invisible Systems sensors can help reduce the repair costs associated with mould. The monitoring has also helped the Housing Association identify and prevent cold and damp within homes.

Using modelling this way means targeted interventions can be made early to improve public health and living environments.

For the 274 Cornwall homes studied by the programme, the Housing Association has been able to:

- Reduce health impacts for tenants
- Avoid unintended consequences of reduced ventilation in energy-efficient homes
- Maintain tenant comfort
- Avoid unnecessary energy costs
- Reduce claim costs

> " Smartline is providing the hard data about people in Cornwall that is critical to allow us to make policy decisions for Cornwall. "
>
> **Rob Rotchell, Cabinet Member for Adult Social Care. Cornwall Council**

Ready to take control of your data?

For a comprehensive consultation on needs of your business, talk to the Invisible Systems team today.

hello@invisible-systems.com

0161 521 8444

www.invisible-systems.com