

# **THE MEANS, MOTIVE AND OPPORTUNITY FOR USING ENERGY SMART METERS IN ORGANISATIONAL CONTEXTS; A RETAIL CASE STUDY.**

**Sian Christina et al.,  
Loughborough University.**

## Agenda

# AGENDA

Background  
Methodology  
Findings  
What next?

## Background

- Smart meters expected in all UK homes by 2020, following extensive research.
- Organizations are increasingly focused on energy costs, climate change and energy supply.
- Relatively limited research around engagement with energy meters in the workplace context

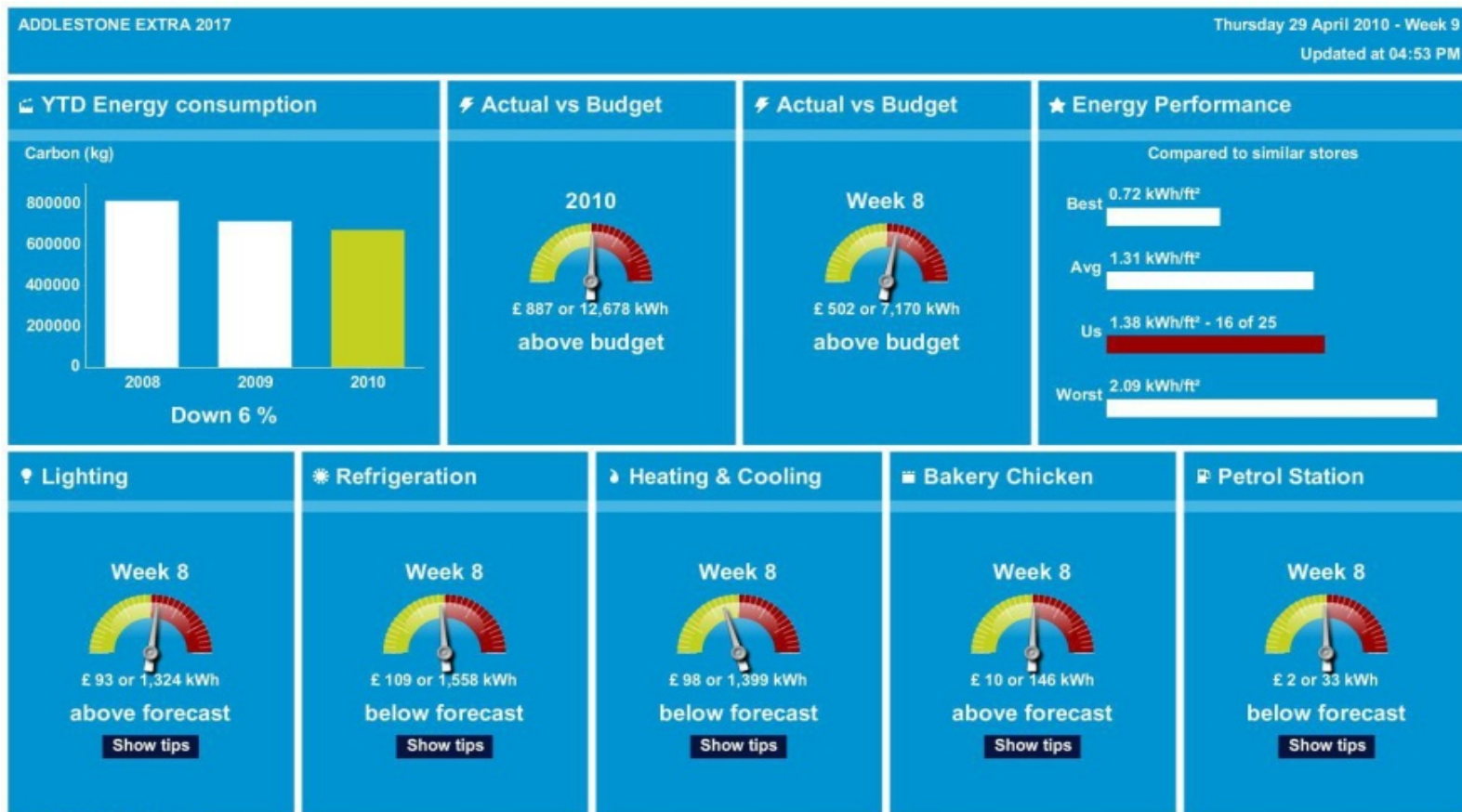


## Background

- ▶ Partner with Tesco.
- ▶ 600 smart meters already in place
- ▶ Part of staff energy efficiency behaviours programme



# Background



## Methodology

- Conducted focus groups and interviews in stores. Total of 56 participants in 10 UK stores.
- Used “Means, Motive, Opportunity” framework for analysis (Raw and Varnham, 2010).



## Means, Motive, Opportunity framework

# means

- The technology or behaviour through which a reduction in energy usage can be made.
- The 'Means' is the smart meter, by providing an impetus for behaviour change amongst store staff.
- Staff interaction with the technology is key.

## Findings

# means

*“The managers can look at it and say ‘Oh Blimey!’, we need to shut the doors, we need to do this, we’re burning too much electricity!”*

*“We don’t have a great deal to do with energy because everything is automated, ... if you are in the toilet for too long you’ll find yourself in the dark!”*

- Clear preference for real-time feedback
- Need a way to prevent ‘invisibility’ over time

*“(they) just become part of the wall, a fixture, and because there are so many other communications up, people just walk past”.*

- Danger of feeling complacent over measures already in place



## Means, Motive, Opportunity framework

# motive

‘Motive’ represents the reason the change would be adopted by the user. These can include global threats from global warming saving money, and avoiding waste.

**Raw and Varnham, 2010**

## Findings

# motive

*““Most general staff it’s all about money. They relate to money.”*

*.....they want to know are we at the bottom of the list, or where are we? It’s very competitive, very driven.”*

- Personal benefit
  - Financial
  - Make my life easier

*“if I could press a little tab and it said ‘your car-park, or shop floor, or cold room is at fault’ we can specifically say ‘we need to do an up-skill with our staff around the cold rooms’*

- Social ambition
  - Competition / peer comparison

## Means, Motive, Opportunity framework

# opportunity

Opportunity refers to the requisite resources of money, space and time needed to build the system to support meters in order to drive sustained understanding, interest and actions.

**Raw and Varnham, 2010**

## Findings

# opportunity

*“People need a briefing on it. It’s very simplified, you can’t get much simpler than that, but if you don’t know, you don’t know”*

*“If someone’s got a million things to do they won’t (take action) ... if you’re going upstairs for your break you’re not going to be bothered*

- Training at all levels despite ease of navigation

*“it will be younger people that go to play with it. Like my mum would not dream of touching that kind of thing, she’d be like ‘stay away from that!’ don’t want to know about anything touch screen.”*

- Tailored approach to instructing action based on smart meter data

## Conclusions

Findings identify crossovers amongst the three framework elements of Means, Motives and Opportunity, demonstrating parallels with domestic research.

<b>MEANS</b>	<b>Importance of simple, directive graphics and real-time feedback for users</b>
<b>MOTIVES</b>	<b>Personal benefit' and 'social interaction'</b>
<b>OPPORTUNITIES</b>	<b>Tailored strategy to support action around the smart meter data</b>

## What next?



- Further qualitative work in distinct organizations is required to validate these findings.
- Currently data on the empirical effects of smart meters on workplace energy consumption is very limited.
- Further work is important to provide direction for organizations

**Any questions?**

