The Use of MDUS in the Smart Metering Landscape

Presented by

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British Gas

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Agenda

- About British Gas
- Market challenge
- Our technology landscape
- The future for Smart homes
- The challenge with data

British Gas – We Are the UK's leading energy services company

6m Electricity
10m Gas
1m Business

4.5m Central Heating Service
1.7m Plumbing & Drains Service
1.4m Home Electrical Service
0.4m Kitchen Appliance Service
0.1m Central Heating Installs

>300k smart meters

25m Customer Accounts
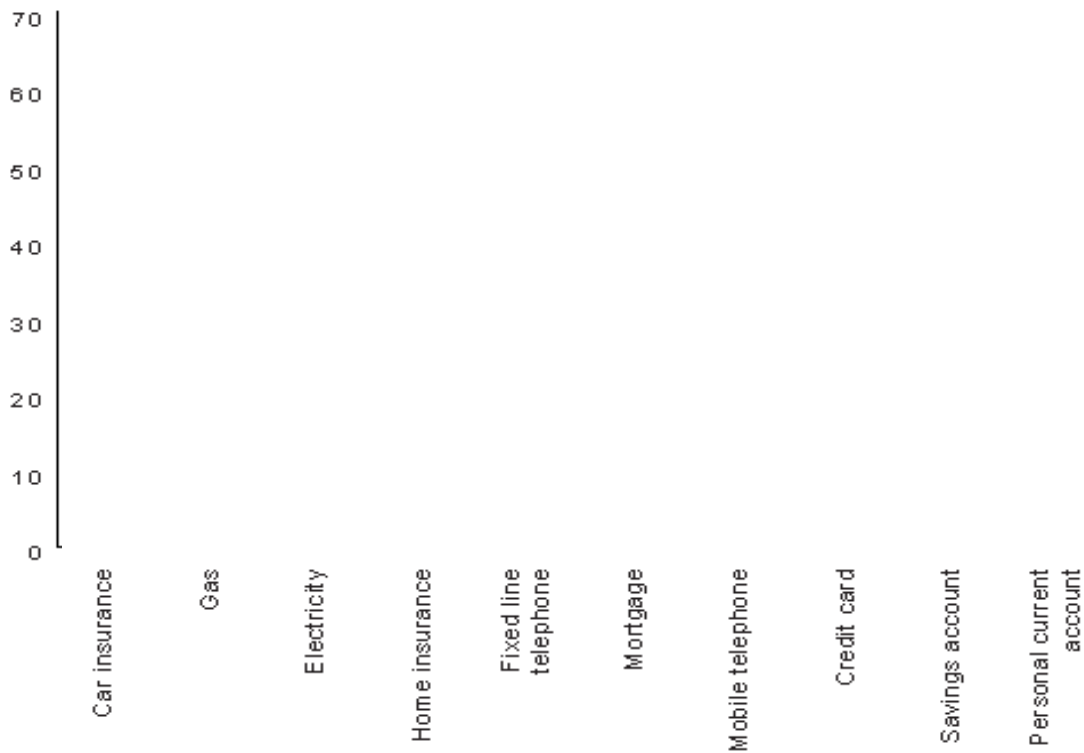
12m Customer Households

10k engineering service staff

Proportion of people switched provider in the last five years

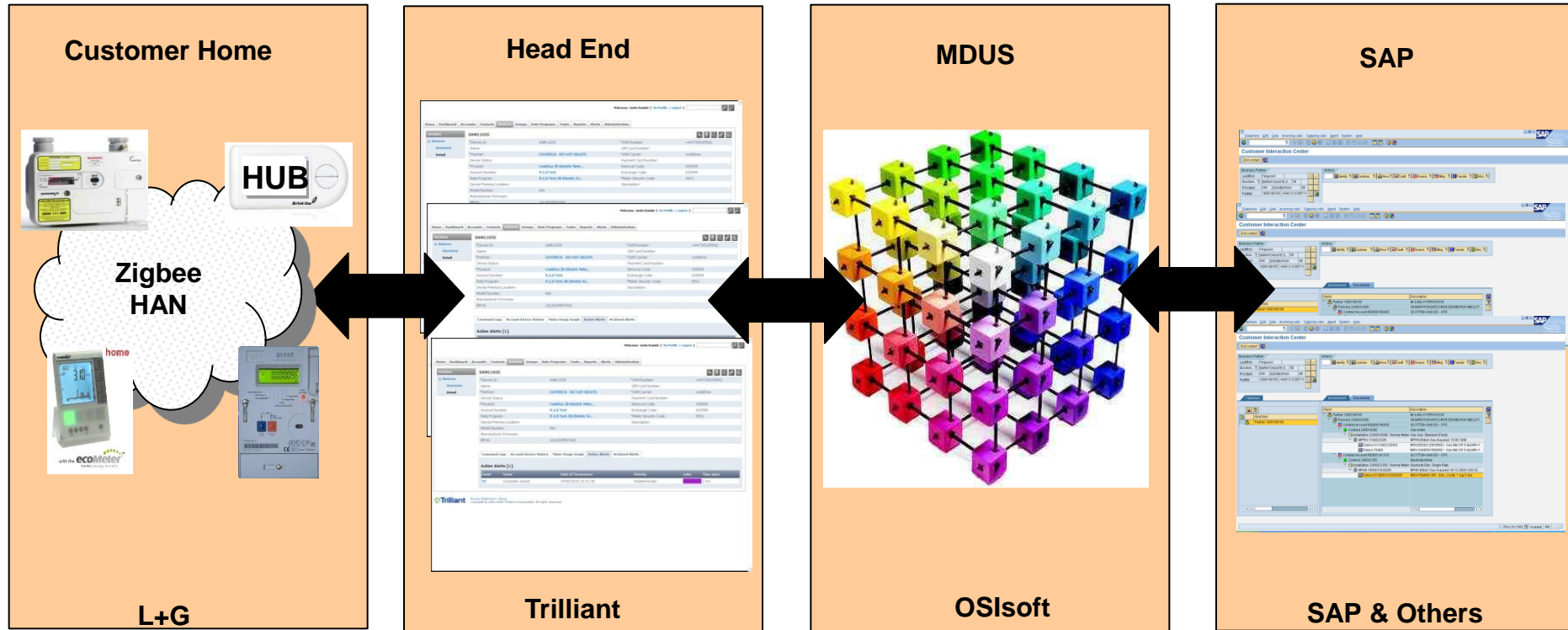Source: Ipsos MORI Consumer survey carried out for the OFT, July 2008

Our Smart Homes Strategy

- British Gas has taken a go-early strategy to deliver benefits to our customers and provide the platform for smart grids in United Kingdom

- Engage customers to reduce consumption

- Improve customer experience

- Programme starts in 2012 and must complete by 2020

- Standards must be an enabler not a hindrance to programme delivery

End to End Solution

Customer Home | **Head End** | **MDUS** | **SAP**

Zigbee HAN

HUB

L+G | **Trilliant** | **OSIsoft** | **SAP & Others**

What have we achieved to date

- We did not use an external SI
  - BG-IS is its own SI
- We relied on the OSIsoft Centre of Excellence (CoE)

- We launched our AMI enabled Read-to-Bill process in April 2010
  - 7 months after contracts

- Our AMI service challenges
  - High Volume Performance – system and hardware processing capabilities
  - Getting interfaces/APIs to work,
  - Enough time for testing
 - Doing too much too soon

The Smart Metering Programme is now part of "Smart Homes", making the home smarter

See your Energy differently in a way that suits you

Roof and cavity wall insulation

Start generating your own energy

Intelligent energy efficient boilers

Proactively manage your consumption

Electric vehicle charging

Looking after your home

Smart Meter with an In Home Display

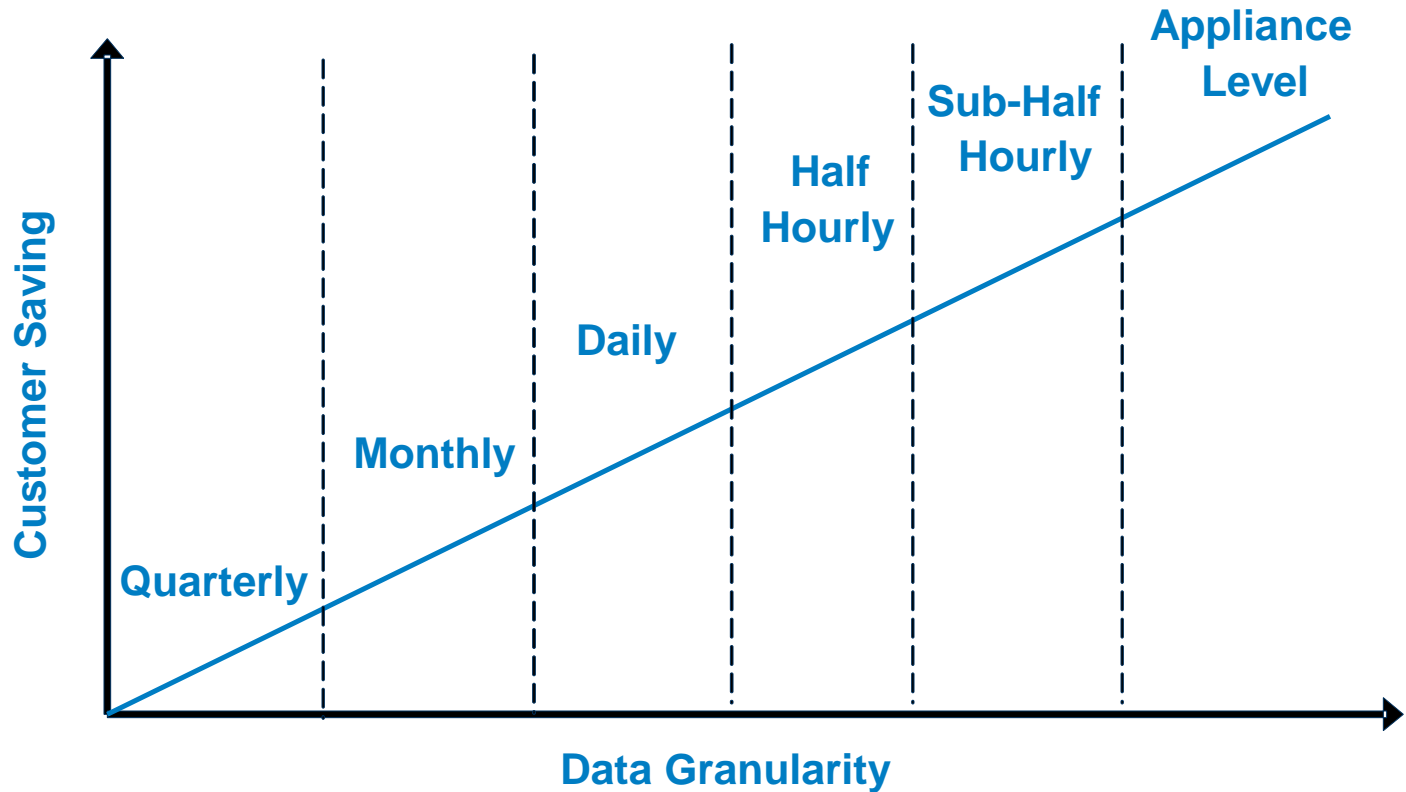Looking after your world

British Gas

Smart metering is the essential foundation for the smart grid, enabling the low carbon economy
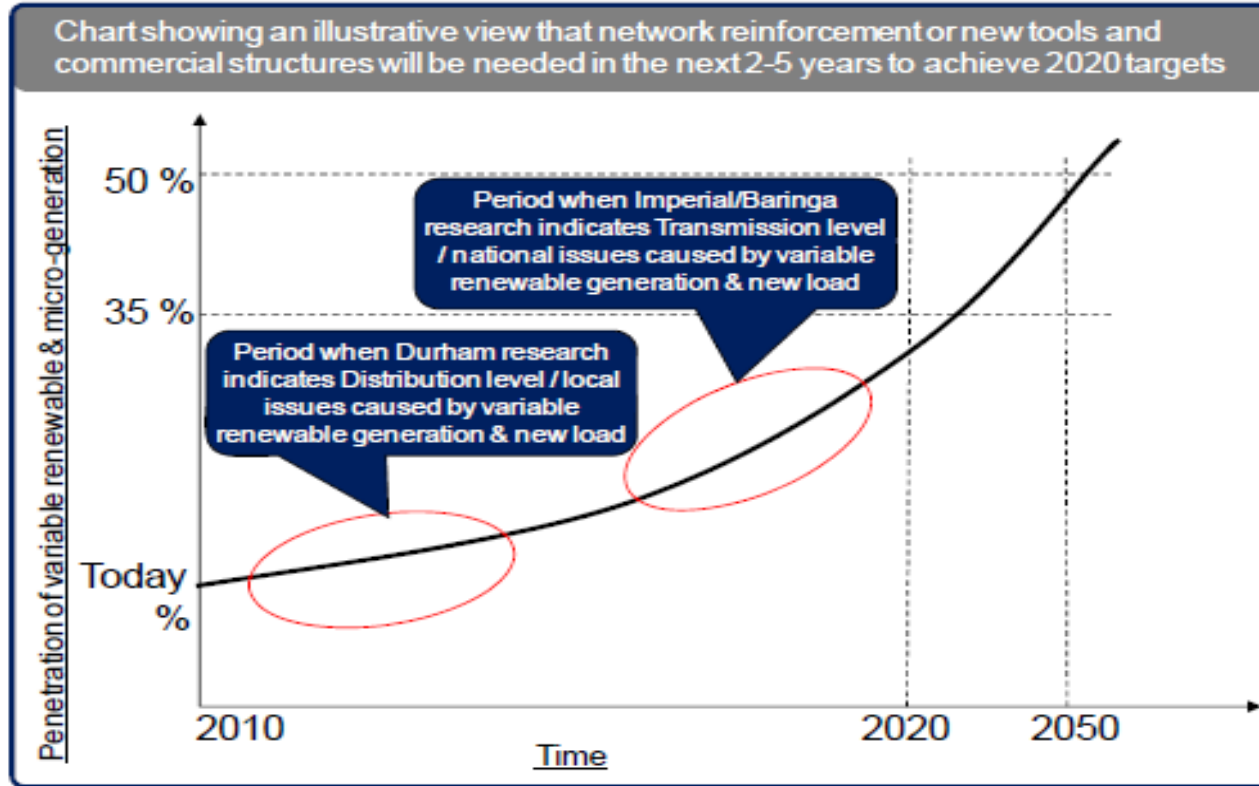
British Gas with CE Electric won the largest of the Low Carbon Network Fund bids – Smart Grid

The relationship between data granularity and consumer savings

94%
of customers have no concerns about data collection

Paradigm Shift

- Decision Making Process:
    - 1-way to 2-way
    - Customer Consume or Sell
    - Sell or Store
- Control
    - From centralised to distributed
    - By energy experts to consumer novices
- Consumers' Attitude Towards Data
    - From "Don't know" to "Don't Need to Know"
    - From "Over-caring" to "Handle with Care"

To transform our relationship with customers,
Transforming their relationship with energy

The Data Challenge

- We will have over 12m homes with between 3 and 10 devices per home
- We will need to collect large amounts of data
  - Half hourly to sub second
- We will have to store and process this data
- **Some** of this processing will have to be "**Near Real-time**"
- End to end security and data integrity needs to be managed

Future Plans and Next Steps

The Questions

- Does processing take place in the home?
- Do we store consumption data with other device level data?
- Can our data store scale?
- How do we make this data available to many stakeholders?

The Actions

- Develop our base SAP AMI end to end capability
- Continue to work with the regulators to develop the Data Communications Company (DCC)
- Work on the Low Carbon Network Fund (LCNF) trials to understand the stakeholder demands
- Run trials and pilots
- Work with our "**Partners**" to jointly develop solutions

Questions

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Thank you