About Citizens Advice

Our charity was founded in 1939. Since then, we’ve given advice, information and support to anyone who needs it.

We help people online, over the phone and face to face through our network of local centres. Every year, millions of people turn to us. This gives us a unique insight into their needs and concerns.

We use this knowledge to campaign on big issues, both locally and nationally. So one way or another, we’re helping everyone – not just those we support directly.
The Consumer Futures Directorate

- Since April 2014 took on the powers of Consumer Futures - formerly EnergyWatch
- This entailed becoming the statutory representative for consumers across Great Britain
- We take a forward-looking as well as reactive role in the energy sector
- Have been particularly involved in the smart meter rollout and work more widely in emerging areas of services founded upon consumer data
What consumers are telling us

- In addition to a ‘built-in’ evidence base we also undertake extensive research with consumers on key issues.
- Many consumers are enthusiastic, especially for an end to estimated bills and for the potential for new services.
- Some of the most common concerns are around privacy and security, particularly people knowing what’s going on in their home and the risk of targeted sales.
- Trust is low in the energy industry generally, as is understanding.
- Despite a wide range of views control and transparency are consistently at the heart of consumer priorities.
Experiences Elsewhere

- Privacy backlash in the Netherlands ended the smart meter rollout
- Recent data-related headlines have undermined confidence in security and privacy
- Consumers are increasingly aware that their data has a value - they are often unconvinced that they see much of it
What happens when you search

Inside a smart meter, and the REAL problem with them.
bigclivedotcom • 440K views • 3 months ago
A look at the insides of a modern smart meter with wireless modem. This meter was found amongst a pile of fly-tipped building ...

Smart Meters are worse than you think (UPDATED)
ScottiesTech.Info • 896K views • 11 months ago
I learned the hard way what's happening with smart meters in Europe. The same type of smart meter they're using here in France ...

Smart Meter, You Don't Want One- Electrical Engineers View
kerbside motors • 42K views • 1 year ago
We talk about why the government urgency to push a smart meters that you don't legally have to have a smart meter. Smart meter ...
What protections are currently in place

- Energy supplier licence conditions ensure that:
  - Only one meter read a day is provided by default
  - Explicit opt-in is required for any more detailed data collection
  - Consumers may opt-out to less regular reads

- This approach affords the consumer some leverage, in order to gain access to more detailed data industry will have to offer something in return

- Suppliers are prevented from becoming gatekeepers to consumer data
Privacy, Security and Safety by design

Historically technology does not have a great track record:

- Trains and cars only began taking safety seriously after decades of avoidable accidents
- The early web was almost completely insecure - in 1999 one two-letter password allowed access to all hotmail accounts
- Bolting safety, privacy and security on afterward is seldom optimal
Implications

- **Blurred boundaries:** everyday objects subject to same opaque contracts that have governed use of previously purely digital products and services. Products fall out of traditional product/service boundaries.

- **Liability/identifying fault:** multiple providers: if service fails is it fault of network, ISP, payment facilitator or intermediary etc? How can consumers work out why something has gone wrong and how to put it right?

- **Licensees not owners:** will we move towards a situation where consumers lease goods and never fully own them? Will we see the DRM equivalent for everyday items? Where does Intellectual Property supersede Consumer Protections?

- **Enforcement:** easy to spot non-contractual use, infractions could be automatically dealt with without independent assessment, for example features might be disabled, access blocked, or data wiped.
Implications

- **Hidden moves**: changes made behind the scenes to the way devices work, without full clarity on what is happening and why.
- **Lock-in**: to a single technology or group of technologies. Leaving contracts may be time consuming or inconvenient, or by operational issues; lack of ability to port data or link together systems.
- **Data use**: privacy implications of data collection and aggregation from such a range of data points. Much more scope for targeting/disregarding customers depending on their value.
- **Security**: closely linked to privacy there are major security issues with regards to data and access to systems.
Implications: amplified for vulnerable consumers?

- Locked out of services: if not able to use familiar alternatives
- Set up of IoT will mirror market orthodoxy now: engaged, informed consumers motivated to shop around and switch to keep providers competitive. This doesn’t work so well now for vulnerable, IoT adds another layer of complexity to navigate.
- IoT enables both people and companies or states to know more, to prove more and to do more. Good and bad applications
  - Sanctions if don’t follow required behaviour (eg healthy lifestyle) vs rewards or easier to access entitlements
  - Better personalised products vs discrimination (eliminate cross-subsidies)
Dystopia: An insecure, disconnected internet of proprietary things

- As other industries move into this area, significant concerns about whether privacy, security and control are being built-in from the ground up
  - Privacy - LG Smart TVs, ‘The Ring’ doorbell
  - Security - Jeep and insulin pump ‘hacks’
  - Control - US police executive research forum views on driverless cars, DVR botnets

- From an industry perspective risks distrust, disengagement and backlash
Utopia: An open, interoperable, internet of consumer-friendly things

- Devices are interoperable and interchangeable
- Standards are open and accessible to new entrants
- Consumers are the gatekeepers to their data and are able to leverage it to their advantage
- Transparent and amendable systems allow consumers to see where their data goes and make changes to this
- Industry agrees to an assumption of how things will work rather than seeking to avoid liability for any failures
- Industry informs consumers when problems are found or things go wrong, doesn’t wait for the media
- Data Dashboards?