

A photograph of a woman and two children. The woman is in the background, looking down. In the foreground, a young girl with curly hair is holding a glass of water to her mouth with both hands, drinking. To her right, a younger child with curly hair is looking towards the camera with a slight smile.

Smart Metering Research

A WaterTalk research report prepared
for United Utilities

August 2022

Agenda

What we'll cover today...

1

Background,
objectives and
approach

2

Executive summary

3

Attitudes towards
water usage, water
meters and the
challenges faced by
UU

4

Openness to 'smart'
technology, sharing
data with UU, digital
meters and reactions
to informative
materials

5

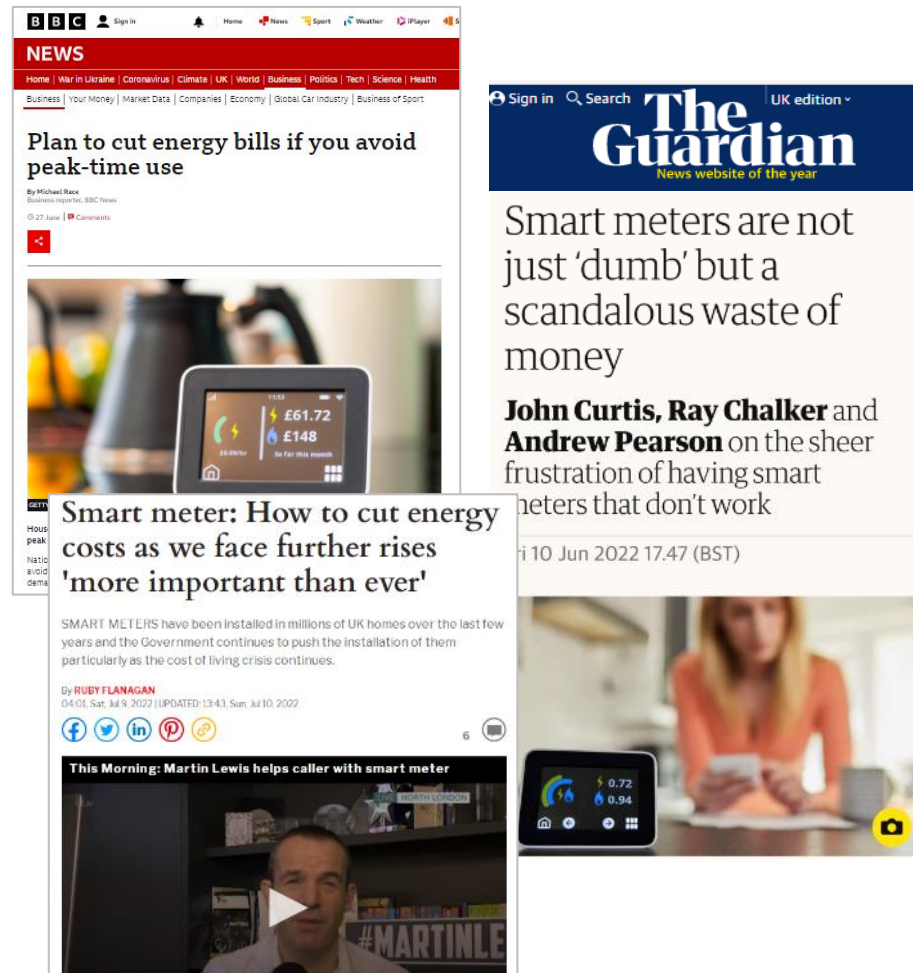
Customers'
preference for water
meter placement and
data usage

6

How to communicate
the rollout

Background

Before commissioning the research, the UU team reviewed learnings on customer perceptions of smart meters in the energy sector



Perceptions surrounding energy smart meters

- **People in Britain know about Smart Meters** and demand remains strong, particularly with the launch of the [new Einstein campaign](#) which focuses on revolutionising our energy system through innovation.
- According to a national survey from [Smart Meters](#), **79% of smart meter energy owners** know what they need to do around the home to be energy efficient.
- Barriers emerged in the initial rollout and majority of these have been addressed widely e.g. concerns over personal data. These have even been turned into propositions and currently reported in the media alongside the 'financial crisis'. (*Example headlines attached*).
- **Current biggest challenge now is 'inertia'** those customers who have lost interest in the smart meter. This could be counteracted with the surge in energy prices and those keen to reduce costs via monitoring usage closely.
- Reported recently in the press is growing negativity around smart meters, with the Guardian headline '**Smart Meters are dumb and a scandalous waste of money**'. Concerns about poor functionality and inadequate network coverage is causing frustration for many customers.

Background and objectives...

Project Background



- United Utilities are committed to water conservation and ensuring a sustainable water supply for the future
- In order to better conserve water, UU have planned:
 - Delivery of 500k new domestic smart meters
 - Replacement of 250k end of life domestic meters with smart
 - Replacement of 150k end of life non-domestic meters with smart
- In the past two years there has been an increase in the uptake of technology and the rising cost of living has resulted in greater interest in smart energy meters (according to anecdotal evidence)
- Therefore, foundational research has been conducted to better understand how open customers are to smart water meters, with a view to aid with proposition development, and how best to communicate this

Research Objectives



The research will cover the following broad objectives:

- Explore smart meter proposition with domestic and non-domestic customers (including both metered and unmetered households, businesses, landlords and 18-24 year old future bill payers)
- Understand levels of customer awareness of the benefits of smart meters and their willingness to take up
- Understand barriers preventing customers from installing smart meters
- Explore propositions and initiatives to encourage customers to install smart meters

Identifying the audiences in this deck

Audiences being discussed on each slide are identified throughout the deck using the following symbols



Household customers who already have a water **meter installed** at their property (**'Metered'**)



Household customers who are currently **unmetered** at their property (**'Unmetered'**)



Business owners and those in the business responsible for dealing with water and United Utilities (**'Businesses'**)



Landlords that own multiple rented properties (3+) (**'Landlords'**)



Future bill payers; those still living at home or in rented accommodation and not responsible for paying water bill directly. All in the 18-24 age bracket (**'Future Bill Payers'**)

Sample and demographics: 59 participants took part in the study

Overall sample

Demographics	No.
Gender	
Male	29
Female	30
Age	
18-34	12
35-54	27
55-64	14
65+	5
Unknown	1
Meter status	
Unmetered households	29
Future Bill Payers	5
Metered households	10
Landlords	5
Businesses	10

Business sample breakdown

Business type	No. employees
Packaging manufacturer	117
Transport	25
Construction delivery	20
Residential care homes	20
Content production	20
Concierge services	18
Hair and beauty salon	8
Wholesale export/import of toys	4
Van and car hire	2
Hairdresser	0

Definition of each meter status

- **Metered (households):** Those who already have a water meter installed at their property
- **Unmetered (households):** Those who do not have a water meter installed at their property
- **Businesses:** Business owners / employees
- **Landlords:** Those who own 3+ rented domestic properties
- **Future Bill Payers:** Those still living at home or in rented accommodation who are not yet responsible for paying their own water bill. All in the 18-24 age bracket

All participants came from a broad mix of regions across the United Utilities supply area

Attitudes towards water scarcity, water meters and the challenges faced by UU

Different groups have varying levels of engagement with their water usage



Unmetered households and Future Bill Payers generally don't consider their water usage in any detail and think their bills are fair

- **They give little thought to how water is supplied to them:** many have little understanding beyond the very basics of the water cycle
- **They use what they need to use:** many don't feel they waste water, and can see few opportunities to use less
- **They broadly tend to think their bills are fair:** Water bills are consistent, as well as generally lower than other household outgoings, and so have no great concerns about their water bill. Future Bill Payers are less close to the bills and therefore have no complaints
- **Future Bill Payers are more interested in environmental issues:** but this does not translate into a knowledge of the wider issues facing the water network



Metered customers and Landlords claim to have a good understanding of water usage, and actively seek to reduce it to save money

- **This audience generally feel they are more conscious of water consumption:** while they take steps not to waste water unnecessarily, many feel there is not much more they could be doing to reduce their consumption
- **Both audiences feel their water bills are fair:** Similar to Unmetered customers, they do not always know exactly how much water they are using (or their tenants) but believe that the bills are not as high as other utility bills

To be completely honest I don't really know anything about how my water supply actually works. It's something I obviously take for granted.

Female, 55+, Greater Manchester, Unmetered

Bills are fair for usage ... Any increases have not been as impactful as others recently due to the cost of living crisis and are more than manageable right now.

Male, 18-34, Greater Manchester, Metered



Knowledgeable or not, satisfaction with bills contributes to inertia. United Utilities' comms should acknowledge that they may think the current situation is ok and then elaborate why they should care about the rollout

Businesses' understanding of water usage is dependent on its role within the business; all accept it as a fairly minor outgoing

Companies that only use water for sanitary purposes (kitchen and toilet usage) don't believe much can be done to alter water usage and pay little attention to it

- For most, there is limited knowledge of their current metering situation – they either don't know where the meter is, take a reading themselves, or only interact with it when they receive their monthly bill



An import/export toy wholesale owner does not monitor their water usage as their bill is a negligible cost. They use a basic amount of water for sanitary and cleaning purposes, including the dishwasher, but don't know the exact amount of water being used

Companies that are water dependent (serves as a core function of the business) claim they are more conscious of their water usage

- They have installed signs to try to encourage more conscious water usage



In a residential home, showers are encouraged over baths and residents are informed about the importance of saving water

All are generally happy with their water bills

- Bills are generally small compared with energy usage, consistent year on year and so relatively easy to budget for

*It's not something that you can easily save money on. I have always felt the rates to be fair given then amount of water used on a daily basis. **Water is the bill that is monitored the least as a business and we concentrate more on the gas and electricity bills, trying to minimise wastage as much as possible here.***

Female, 35-54, Greater Manchester
Business

*I feel our bills are fair to be honest, I'm fairly satisfied with the rate, **it has been consistent and that helps with our budget.***

Female, 35-54, Greater Manchester,
Business

But there is opportunity to change this as there is great emphasis on sustainability targets for the Business audience



Many Businesses are actively trying to become more sustainable

- This mainly takes the form of trying to cut CO2 emissions through greater emphasis on renewable energy, recycling, reducing travel, insulating their properties and trying to limit paper usage
- The targets themselves typically consist of getting to Net Zero as soon as is commercially feasible



But few are focusing on reducing their water usage as part of their sustainability initiatives

- Three Businesses (a manufacturing plant, residential home and transport company) are actively trying to reduce their water usage as part of their sustainability initiative
- Generally, businesses that are water dependent will be more open to messaging about lowering water usage as they are already trying to do this

My company hopes to be net zero by 2030 by using renewable energy, recycled rain water, the banning of single use water bottles and using electric vehicles to take staff to and from locations.

Male, 35-54, Merseyside, Business

We have run green initiatives in the office for the staff to be proactive with water usage and electric. We have installed signs and reminders to keep this policy running.

Female, 35-54, Greater Manchester, Business



This presents an opportunity for United Utilities to draw attention to the sustainability benefits of reducing water usage, and how greater collaboration with United Utilities can achieve this

The increased cost of living creates an additional dilemma for Unmetered customers, many of whom are still resistant to getting a meter

Perceived upsides of water meters

Potential money saving

- Some believe there is a possibility of saving money though they cannot immediately see how they would do this (there is no clear anchor against what they are already paying)

Better for the environment

- Some believe that a meter would encourage them to be more conscious with their water usage
- However, few make a clear connection between their water usage and its impact in addressing wider problems of climate change and water scarcity

Perceived downsides of water meters

Risk of having an increased water bill

- Many are concerned they may pay more with a meter
- Even after being shown the challenges facing United Utilities, many struggle to see past the potential cost barrier

Installation is a concern

- There are issues around effort involved in installation, booking appointments and whether there is any additional admin required

Negative aesthetic impact on home

- While less of an issue compared with financial concerns, some want to know how big the meter is and whether it will have a negative impact on the home environment



These barriers mirror the findings from the Shadow Meter research; barriers are associated with water meters themselves rather than smart technology, as we'll see



Rising living costs are seen by many Unmetered customers as the immediate and absolute focus; getting a meter is not a priority

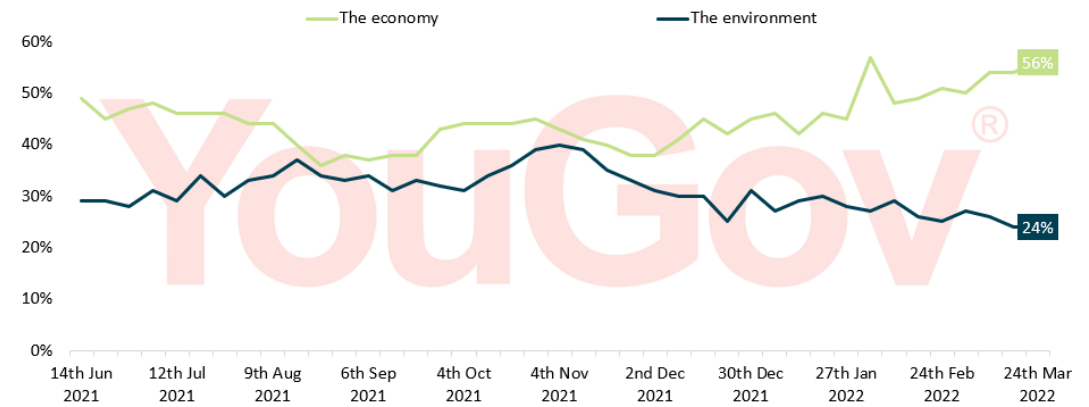
Across all demographics, customers are paying more attention to outgoings

- Many talk about adapting their lifestyles in response to the pressure of rising costs (changing shopping habits, cutting back on leisure, etc.)

Many contemplate the future with apprehension: they fear their quality of life will diminish if prices continue to climb

- Recent evidence shows that household costs are becoming more of a priority than the environment
- And so the environmental benefits of water meters can pale in comparison against concerns about costs
- This is because Unmetered customers largely see installing a water meter as an unnecessary gamble

YouGov's tracker records a decline in consumer concern for the environment in place of growing worries about the economy



*I use as much water as I need to because I don't have a water meter installed. **The main reason for not applying for one is worry about the costs.***

Female, 35-54, Greater Manchester. Unmetered



Lowest bill guarantee will resonate and will likely help alleviate concerns about financial implications

Source: YouGov tracker
<https://yougov.co.uk/topics/politics/trackers/the-most-important-issues-facing-the-country>

Metered customers and Landlords claim to have a good understanding of water usage, and actively seek to reduce it to save money



Those with meters are primarily motivated by financial gain and the idea of 'fairness'

- Many see that meters are a motivator to use less water (up to a point) and many have realised this benefit
- Some also feel that water meters are intuitively fair. 'Paying for what you use' makes sense, though there is some pushback from those with larger families
- Environment considerations are rarely top of mind, but some state that provides a nice 'feelgood factor' in addition to the monetary savings

*Our decision to install a meter for saving money has moved on to influencing friends and family of not only the cost saving, but the realisation that in your own way you are helping the environment. If you leave a light on it costs you money, if you leave a tap on it costs you money - **no brainer**.*
Male, 55+, Merseyside, Metered

They're fair. I like having a meter so they are more accurate. I am with United Utilities for all properties and find them competitive.
Female, 35-54, Greater Manchester, Landlord



Further evidence that the lowest bill guarantee will resonate

Context: customers were then informed about the challenges United Utilities face when it comes to water supply and leakage

1

Population increase has left to us using around twice as much water in UK homes as we did 60 years ago, this means the demand for water is growing and putting pressure on water supplies

2

Climate change and unpredictable weather events lead to an unpredictable water supply required and it has made it harder to manage

3

If we do not halve our water leakage over the next 25 years we are looking at a water shortfall. This may be reduced by working with United Utilities customers to identify and fix property leaks, this as a result will lessen your carbon footprint

The Challenge

1 Demand on water is growing, putting pressure on water supplies:

- Personal water use in the home has **increased by over 60% since the 1960s**. There are **an additional 13 million people now living in the UK, and this figure is rising**
- This means that overall we are **using around twice as much water in UK homes as 60 years ago – an extra 2,000 Olympic swimming pools a day**

2 Climate change and extreme weather events are unpredictable:

- According to models developed at Manchester University, in the North West summers will be 18% drier and winters 13% wetter by 2050 with an increase in extreme weather events such as droughts and flooding
- This makes the **supply of water more unpredictable and harder to manage**

3 Long term supply and demand models are predicting a potential water shortfall by 2045 in the North West:

- At United Utilities, we are committed to reducing leakage in our network. We have worked hard to hit our leakage targets for the last 16 years and working with the environment agency and the regulator (Ofwat), we want to **halve our leakage over the next 25 years in an economic and sustainable fashion**. By 2025, it is estimated that around 381 [megalitres](https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/articles/overviewoftheukpopulation/2020) (152 Olympic sized swimming pools) will be lost through leakage per day on our network and in customers homes and businesses¹.
- We also want to work with customers to **help identify and fix leaks on your properties**, as well as identify ways that we can all save water by being more efficient. An efficient home is considered to be one where water usage is less than 110 liters per day, per person. Currently, in the North West this figure is **over 140 litres per day on average**.
- Reducing water usage also **reduces your carbon footprint** and could save you money on your bill (if you are a metered customer).

Copyright © United Utilities Water Limited 2019

¹ <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/articles/overviewoftheukpopulation/2020>

* The non-household participants were instead shown:
“There are 1.2million Non House-hold (NHH) properties in England and Wales. They consume around 30% of England and Wales total water, about 3bn litres per day. We are committed to reducing NHH water usage along with HH water usage to make our supply more sustainable”
We used two slightly different stimuli in order to personalise the issues to the different participant groups

All segments' first reaction to the challenges facing United Utilities is surprise mixed with apathy as few imagine a 'water scarce' future



They appreciate that these challenges need to be solved and are surprised about the quantities of water that are lost to leakage

- Many have a negative kneejerk reaction to the idea of 'wasting water' and are surprised they have never heard about this issue in the media before



However, the consequences of water supply issues are felt to be 'future problems' and so are not felt to be immediately relevant for many

- This is likely being caused by 'the empathy gap', a well known cognitive bias in which people struggle to comprehend how their future selves will feel in the future (in this case, with a scarce water supply coupled with the daily effects of climate change)



Many therefore assume water supply issues will be resolved by United Utilities before the problem worsens

- They largely believe the responsibility to solve these issues lies with United Utilities
- They take it for granted United Utilities will fix this and pay little thought to how this would be best achieved



Wrangling people out of this 'immediate' mindset will require long and targeted campaigns that should 'empower' customers to take greater personal responsibility by informing them about the impact they could have. Government wider backing may be needed.

Customers are surprised about the extent of leakage, but downplay their personal responsibility in helping tackle this

The biggest shock is the volume of 'leakage' within the network - 152 Olympic sized swimming pools by 2025 is absolutely shocking!

Female, 35-54, Greater Manchester, Business

I've never really thought about the effects of rising water levels as it doesn't affect me directly.

Female, 18-34, Greater Manchester, Future Bill Payer

If the inevitable happens and there is a shortage, UU will fix it.

Female, 18-34, Cheshire, Unmetered



What this means:



- Educating customers on the volume of water leakage surprises many and brings the thought to the front of their mind, whereas they may previously have not been aware of the situation
- However, there is still a lack of personal responsibility for water leaks as there is the belief that United Utilities will fix the issues

Only anecdotal differences were observed between customer segments with regards to initial reactions to the challenges faced



Metered customers feel even better about having a meter knowing it helps in the fight against water scarcity and climate change



Some Unmetered customers deflect responsibility and downplay the issues



Landlords and Businesses place greater emphasis on the challenge of instilling a greater sense of responsibility among customers

Some are sceptical if this could be achieved by giving customers the choice to opt-in. They think that this will need to be mandatory to be successful

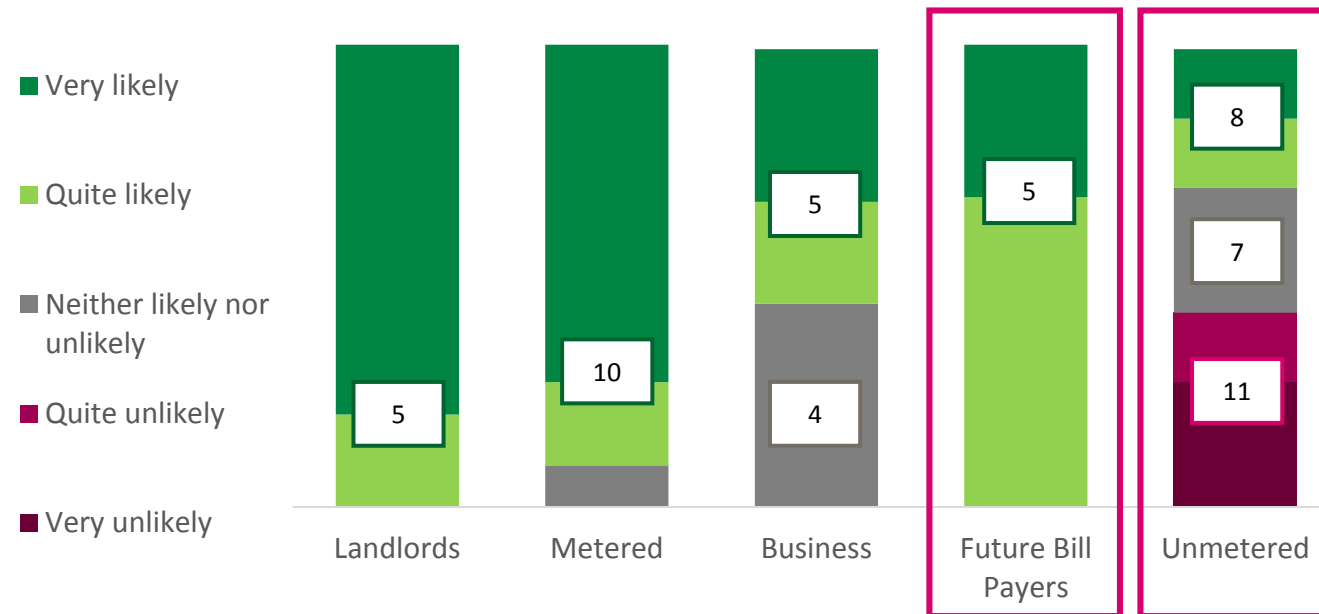


Future Bill Payers are the most concerned about climate change and feel more needs to be done to increase awareness

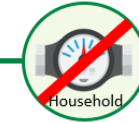
All but Unmetered customers feel they would be willing to install a water meter to solve water supply issues

Non-households were asked: How likely do you think you would be to install a water meter that details your water usage and patterns of use, based on what you know so far?

Households and Future Bill Payers were asked: Overall, how likely do you think you would be to install a water meter that shows you your water usage, based on what you know so far?

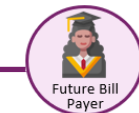


Results are indicative, interpret cautiously, low bases



Unmetered group are primarily concerned about the prospect of higher bills

Other segments do not hold this reservation to the same degree and are much more open as a result



Future Bill payers express greater concern about the environmental challenges and believe that water meters are a viable solution to tackle climate change and water scarcity

Openness to 'smart' technology and sharing data with United Utilities

Impressions of smart technology are generally positive for all segments – there is a sense that the world is already completely digital



Most customers are familiar with the use of smart technology, and appreciate its convenience & time / cost saving benefits

- Customers use smart devices such as phones, lights, Hive, Alexa, smart energy meters – all praised for making their lives easier and more convenient as they do not need to control them manually
- For **Businesses**, smart devices such as CCTV, lights, heating systems & printers are appreciated for their efficiency, ability to track usage & minimise costs



Most are happy to share their data in return for tangible benefits to the customer



- Sharing data with companies is an accepted part of modern life, and most customers across segments are happy to do so for the convenience benefits they receive
- There is an expectation that United Utilities would require customers' water usage data in order to bill accurately, provide granular data & advice
- **Businesses, Landlords & Metered households** expect United Utilities to already have their personal water usage data to hand with their current meters so this would be no different.
- **Businesses** are happy for both retailers and United Utilities to have access to their water data. However, there are some concerns about data security & selling to third parties – there is a need for reassurance that data is stored securely and not misused



Business customers will only need to be briefly told what their water retailer does with the data in future comms to alleviate the very minor concern of data security

...and some go as far to say this is not only a great idea, but essential to the preservation to the water network

*If data is used to help reduce our energy needs and water consumption by using smart / digital tech then **its a great idea.***

As long as the data is secure.

Male, 35-54, Merseyside, Business

*I don't mind (United Utilities) asking as it is for the benefit of the consumer and that data isn't being sold on unknowingly. I think **we live in a technology based world now and are providing 'data' constantly.***

Female, 35-54, Merseyside, Unmetered

*I wouldn't have concerns about United Utilities as well as the retailer having data on usage as **they are obviously part of the water based network and would need to know about leak/repairs etc***

Female, 35-54, Greater Manchester, Business



What this means:



- Customers are familiar with smart technology holding their data and therefore have an expectation for United Utilities to do so
- However, they require reassurance that their data will not be used or stored externally and that security breaches will not happen

Context: customers were informed about the challenges United Utilities face when it comes to water supply and leakage

1

The biggest difference between the two meters is how the meter is read

2

Traditional water meter readings are visually obtained, either by the customer themselves or the meter reading team. The data is used to parallel their water usage to the amount they are paying

3

Digitally - read water meters can be read more frequently. The data is used for customer bills, to detect property leaks and to measure water usage

Different ways to read a meter

There are a few different types of meters that work in slightly different ways. The biggest difference for you is the way that the meter is read:



Traditional water meter

- Meter readings are obtained visually i.e. someone looks at the meter and writes down the reading
- * This can either be done by yourselves or by one of our meter reading team
- This data can be used to make sure that the amount you are paying is in line with the amount of water you are using

Copyright © United Utilities Water Limited 2019



Digitally-read water meter

- Data can be read more frequently, e.g. every hour or even every 15 minutes
- This data can be used for bills
- It can also be used to;
 - Detect potential leaks in your property
 - See how many litres of water you are using a day
 - Help us understand our network and identify where there may be potential leaks

3

- * The non-household participants were instead shown:
“This can either be done by yourselves or by your retailer”
We used two slightly different stimuli in order to personalise the issues to the different participant groups

All segments can appreciate the improved tracking benefits of digital meters, ensuring fairer billing while also protecting them from leaks

Whilst all customers are able to appreciate the benefits of digital meters, customers who already have meters fitted (**Businesses & Metered**) are most likely to see digital meters as a welcome technological upgrade from traditional meters



Perceived benefits of digital meters

Digital meters ensure customers pay a fair amount through more accurate readings

- Amongst households, those with smaller families / living alone are thought to benefit the most

Digital meters detect leaks

- Ability to quickly identify & fix leaks in the home / business – there is an understanding that if a leak is left long enough it could cause damage and cost more money to repair
- Some also appreciate the fact that United Utilities is able to monitor the network & fix leaks on a larger scale.

Digital meters instil greater conscientiousness in water usage

- There is awareness that it is beneficial to monitor water use in order to actively reduce usage & wastage
- Some (mainly Businesses with high water consumption & Metered households) appreciate that more granular water usage data would allow them to better understand how they could cut down on their usage and save money

Digital meters provide automatic readings

- Some Businesses & Metered customers like the fact that they would no longer have to take manual readings – less work, more convenient

*Lower water usage and **lower bills for the tenants**, this I see as an advantage for the tenants.*

Female, 55+, Greater Manchester, Landlord

*It does allow people to be more careful and **cut back on the water they are using.***

Female, 18-34, Merseyside, Metered

***Understanding what usage should look like**, sharing best practices with similar businesses in the area will help implement best practices and save water and money.*

Male, 35-54, Greater Manchester, Business

Unmetered customers raise the greatest barrier to digital meters, although this is about meters in general, the risk of increased bills

However, across segments, we see some minor concerns about digital meters in particular. Some Businesses are happy with their current metering setup and are not convinced the tracking benefits of digital outweigh the potential downsides

Perceived barriers of digital meters



Digital meters may result in greater costs

- For Unmetered customers, most of their financial concerns are directed against meters in general. They believe that it will work out cheaper to pay a fixed amount than be charged based on consumption
- Digital meters are also perceived as expensive due to their advanced features (especially compared to traditional meters) – there is therefore some concern that this cost will be passed on to the customer in some way (e.g. installation costs, higher water bills)

Digital meters may be an unnecessary upgrade

- For some Businesses, while they can appreciate the granularity of data for companies that use high volumes of water, digital meters seem excessive to their needs as their water consumption is low & there is less need for tracking

Digital meters may break down

- Since digital meters rely on electricity, some have worries about losing functionality of the digital meter, if the electricity / internet goes down

Digital meters may not be secure

- Some believe they may find it intrusive if the data is used externally, or accessed, without the customers permission (n.b. this is likely a kneejerk reaction & a research effect in looking for the downsides)

As the mother of 3 young children I use a significant quantity of water. I could potentially end up paying more than what I do now

Female, 18-34, Cheshire, Unmetered

I did the checks and found it would cost me more to be on a meter and once on one you can't change back to a flat rate

Male, 55+, Cheshire, Unmetered

*I have concerns about **data security and privacy**. It needs to be incredibly robust.*

Male, 35-54, Cumbria, Unmetered

No great advantage to my business, I can only see a larger cost

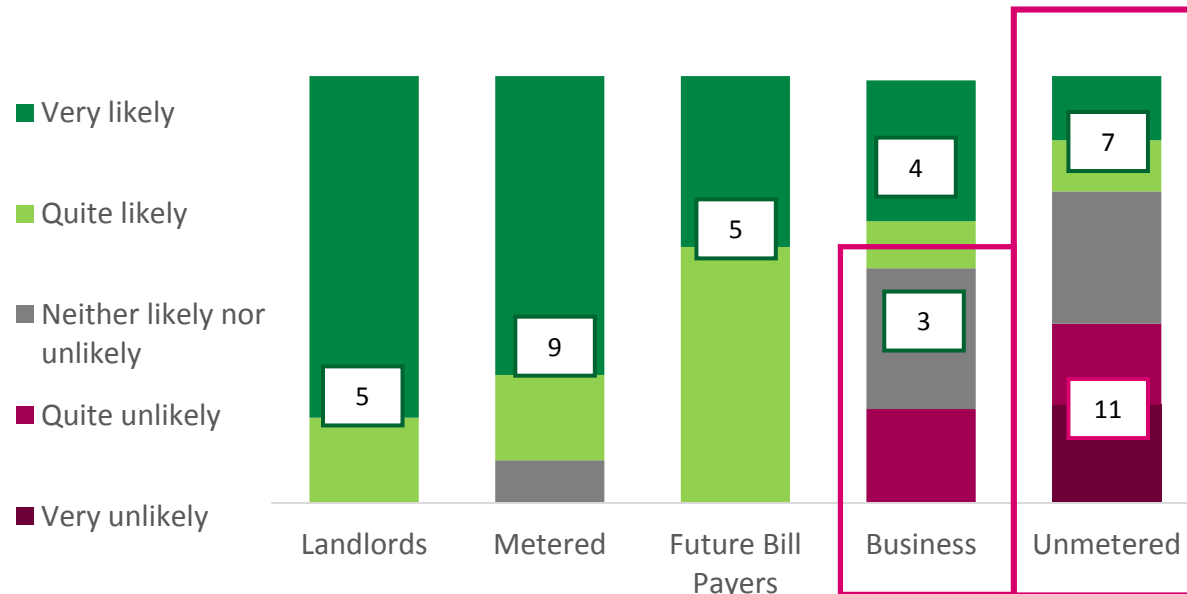
Male, 35-54, Greater Manchester, Business



Future comms needs to address these concerns, the bulk of which are monetary

Business and Unmetered customers demonstrate the greatest resistance to digital water meters

How likely do you think you would be to have a **digitally enabled water meter** installed based on what you have read about them so far?



For Unmetered customers, concerns are primarily directed at meters in general as opposed to 'smart technology'

- Potential significant increase in bill (especially if high consumers of water)
- Appearance / size of digital meter
- Data security

For Businesses, the primary concerns are:

- Potential increase in bill (due to costs of advanced features being passed on to the customer)
- No need for sophisticated / more granular data (don't use enough water)
- Potential installation costs
- Logistics around setup/ will this be during business hours?
- Minor concerns about it being an eyesore / system breakdowns



Assurance of a lower bill and no installation costs will make both these audiences much more receptive

Context: 5 potential features of Smart Meters were shown to gauge appeal. Business/Landlords shown slightly different benefits

Households

A digitally enabled water meter may include any of the following features and benefits. Please rank them in order of appeal:

1. Fair and accurate billing (all customers paying for what they use)
2. Help in finding leaks within the home to prevent additional cost and damage to property
3. Help in reducing water use which may also help to reduce your energy bill (much of the water that is wasted in a home is heated water)
4. Help in reducing water use which will reduce your carbon footprint through the reduced use of water and energy
5. Help in understanding your water usage so you can be more in control and more aware of how much you use

Businesses

A digitally enabled water meter may allow United Utilities and/ or your retailer to offer the following services.

1. Where leakage is identified from your water usage data, a fix service is offered or plumbers recommended
2. Data analytics of your water usage, E.g. helping you to have more of an understanding and control of your water usage
3. Visualisations of your consumption data over time and/ or how you compare to other peers
4. Frequent business water audits – an advisor will attend the premises to assess water usage and help identify leaks and opportunities for reducing water usage
5. Water saving devices/products offered by United Utilities or your retailers

Landlords

A digitally enabled water meter may allow United Utilities to offer the following services.

1. Where leakage is picked up by United Utilities, a fix service is offered or plumbers recommended
2. Frequent water audits – if requested by the tenant, an advisor will attend the premises assess water usage and help identify leaks and opportunities for reducing water usage. The tenant will then be responsible for contacting the landlord in case of any issues

Fair and accurate billing is the most appealing feature of digital meters for Metered and Unmetered households

Appeal of features of digital metres – ranked.

Results are indicative, interpret cautiously, low bases

Most important	Future Bill Payers		Metered		Unmetered	
	Rank	Feature	Rank	Feature	Rank	Feature
	1 st	Reducing water / reduce your carbon footprint	1 st	Fair and accurate billing	1 st	Fair and accurate billing
	2 nd	Finding leaks	2 nd	Finding leaks	2 nd	Finding leaks
	3 rd	Fair and accurate billing	3 rd	Understanding your water usage	3 rd	Reducing water / reduce your energy bill
	4 th	Understanding your water usage	4 th	Reducing water / reduce your energy bill	4 th	Reducing water / reduce your carbon footprint
Least important	5 th	Reducing water / reduce your energy bill	5 th	Reducing water / reduce your carbon footprint	5 th	Understanding your water usage

For **Metered & Unmetered** households, cost of living remains top-of-mind: these groups are more concerned with fair and accurate billing as they consider it important to pay only for what they use

Future Bill Payers are more drawn towards environmental benefits, as billing is not as top of mind



Across all groups, **finding leaks** is stated as the second most important feature of digital meters, likely as a result of learning about leakage challenges. Many can now appreciate the personal & broader benefits of identifying leaks, and the role digital meters can play in fixing these sooner – a potential comms hook

Outside of the current benefits of Smart Meters, incentivising reduced water consumption has more promise than smart tariffs

1

Incentivising customers by rewarding them for reducing their usage to a certain level receives a lukewarm reaction as potential savings are not understood

- Rewards are appealing to customers – overall sense that this **increases the motivation to reduce water consumption**
- Customers want more information about the size and details of the incentive – sense that this **should reflect individual household circumstances**, or it wouldn't have the same impact / motivational power
- Rewards should be **noticeably lower bills or vouchers** (shopping / meals)

*Offering incentives for using less water can only be a good thing. **In general people respond well to reward based schemes.** At this difficult financial time most homes are looking to reduce their financial outgoings.*

Female, 55+, Greater Manchester, Unmetered

*Concerned that customers may be **forced into incentives against their will**, but a range of incentives may tempt more people to have a meter... a low use tariff for example.*

Male, 55+. Greater Manchester, Unmetered

2

Smart tariffs (e.g. cheaper tariff offered at peak hours to encourage water use when demand is low) is felt to only be relevant for those with a flexible routine

- **Smart tariffs raise more concerns** amongst both Metered & Unmetered
- The biggest concern is the fact that it is **difficult to change water consumption routines to fit off-peak hours** (unlike other forms of smart tariffs e.g. charging electric car overnight) – most water is consumed around working hours, which cannot be changed
- **Lower users should not be penalised** for using at peak times, & there is some scepticism that cheaper tariffs would be compensated by higher regular tariffs


*High water usage activities such as having baths and showers have to fit in to work activities and **cannot be moved around to fit peak and off peak usage times.***

Male, 55+, Greater Manchester, Unmetered

*I suppose I might use my washing machine a bit more at night, but **I can't really see me doing anything else differently.***

Male, 35-54, Cumbria, Metered

Leak identification / offering plumbing support is the preferred benefit amongst both Businesses & Landlords

	Business	Landlords	
Leakage services/ plumbing recommendations	<ul style="list-style-type: none"> ✓ Saves times i.e. don't have to look for plumbers Reduces delays and costs associated with leakage Business may want to get comparative quotes 	<ul style="list-style-type: none"> ✓ Allows issues to be handled without the landlord's involvements Possibly lead to quicker resolution of issues Quotes should remain competitive 	
Data analytics of your water usage	<ul style="list-style-type: none"> ☹️ Open to this, as it can give better understanding of data to use water more efficiently But data must be easy to analyse & trustworthy There mustn't be hidden costs linked to this 	 <p>Overall, Businesses and Landlords are open to the added features of digitally enabled meters, however possible cost implications, as well as disruptions to the business, will need to be mitigated as they act as potential barriers</p>	
Visualisation of your consumption data	<ul style="list-style-type: none"> ☹️ Mixed reaction to receiving comparative view to other businesses – businesses aren't all comparable Beneficial to have access to data however, concept needs to be clearer: what visualisation am I getting? 		
Water saving devices/products	<ul style="list-style-type: none"> ☹️ Cost benefit is appealing, but lacks relevance for some non-water dependent companies Should not disrupt day to day business Devices would need to be reliable & tested 		
Frequent water audits	<ul style="list-style-type: none"> ✗ Could result in too many visits to the business Benefits of this feature are unclear for non-water dependent companies – water consumption doesn't feel high enough 		<ul style="list-style-type: none"> ✗ Potential to be costly & require additional equipment Could increase interactions between landlord & tenants

I think [water audits] sounds like a lot of hassle. I would get frustrated with a tenant getting told 'ideal' fixes to things / equipment needed. Potentially costly.

Male, 18-34, Greater Manchester, Landlord

What this means: in general, there are minimal objections to digital, but concerns about the cost implications of meter installation remain

Data sharing is not a top of mind concern

- Customers appreciate the convenience benefits of smart tech and are happy to share their data with United Utilities, as they do with other smart tech providers – there's a sense that this is the future
- As with smart technology in general, there is a need for reassurance that this data is kept secure & will guarantee customer benefits

Pushback comes primarily from the Unmetered, who are opposed to meters in general

- Fears of increased bills are a key barrier amongst a core group of water meter opponents
- But some Businesses who use less water also believe that digital meters are potentially too sophisticated for their needs (don't require granular data – satisfied with their current meter), and are concerned that this will raise costs

Across all groups, accurate billing and identifying leaks are the more promising benefits to play on

- For Businesses, Landlords & Households, the idea of fair billing & potential cost saving benefits of identifying leaks can be compelling
- For FBPs, the environmental benefits of smart meters (reducing carbon footprint) are also convincing

Customers preference for water meter placement and data usage

Context Slide: Household customers and Landlords were informed about the pros and cons of different water locations

1

Meters can be placed both inside or outside of the home. Inside the property may include spaces such as cupboards, whereas outside of the home the meter would be fitted under the pavement

2

Internally fitted meters are cheaper to install, have a better signal strength and are able to detect leaks. However, they take up space within the home, especially as minimum pipework may be reconfigured and an appointment is needed for the fitting

3

External meters can also detect leaks, but it means nobody needs to be home for United Utilities to read the meter. However, they are more costly, may have a reduced signal strength and may not be available to those living in a flat or having a shared supply. United Utilities will also need to dig multiple holes in the street to fit

Meters can either be placed inside your property or externally

Inside a property *(a cupboard in this case)*

Pros

- ✓ It's cheaper for us to install meters internally, so we can keep bills lower for customers
- ✓ Above ground, we get a better signal strength to communicate and read your meter
- ✓ It will be possible to detect a leak in your property

Cons

- ✗ The meter will require some space in your home and probably needs to be hidden in some way (see image)
- ✗ An appointment will be required to have the meter fitted or for any maintenance or replacements
- ✗ We may require some minimal pipework to be reconfigured to accommodate the meter



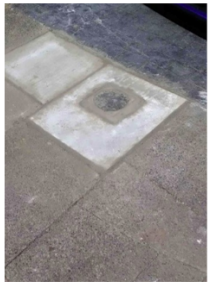
Outside a property *(under the pavement in this case)*

Pros

- ✓ We can get easy access to install the meter and to check it when ever we need to, without disturbing you
- ✓ As well as being able to detect any leaks in your property, we can also detect leaks on your supply pipe (the pipe that goes from the street to your home)

Cons

- ✗ It costs us more to install meters like this meaning the number of meters we can install for a given investment is less
- ✗ We will need to dig multiple holes in your street which could require street works and potential inconvenience
- ✗ In some cases this option is not possible – for example you have a shared supply pipe or live in a flat
- ✗ Some meter pits can be very deep, leading to communication issues meaning we can't always read the meter



N.B Businesses were not asked this question because they are already metered and the location of their meter is unlikely to change.



Many respondents favoured meters being fitted inside the home opposed to externally

Overall, almost $\frac{3}{4}$ of the sample would prefer to have a meter fitted internally rather than externally*

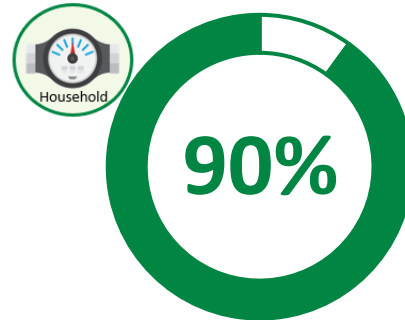
All Future Bill Payers had a preference for internal meters



Rationale:

- Cheaper to have them installed inside the home
- It would also be easier to read and easier to access (as long as it was installed out of sight)

9/10 Metered customers also preferred internal meters



Rationale:

- Cheaper installation than external meters
- Provides United Utilities with a better signal strength which ensures more accurate billing
- Some customers feel internal meters are tamper-proof

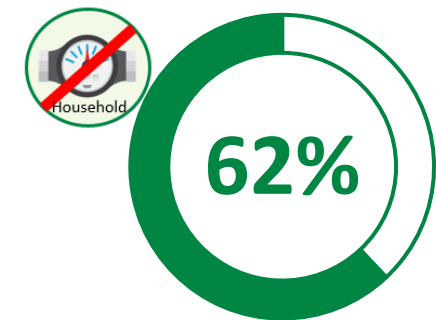
4 of 5 Landlords would have a meter fitted internally



Rationale:

- Ease of being able to identify which property the meter belongs to (as this is more difficult with external meters)
- Internal meters will be easier for tenants to access

However, only 18/29 Unmetered customers prefer internal meters



Rationale:

- Lesser costs for both the customer and United Utilities compared to external meters
- Safe from vandalism and the elements
- Less disruption
- However, the space a meter will take up internally is an issue for some

* Results are indicative, interpret cautiously, low bases. Business customers are not included in this sample

(The potential inconvenience of United Utilities coming into the property to subsequently maintain the meter did not feature in their thinking.)

All segments are open to the data being updated by United Utilities every 15 minutes, but are happy to receive monthly updates

- All segments are aligned in their thinking: the more frequently United Utilities can take readings, the more accurate the data will be and this ensures the fairest/ most accurate bill possible
- However, many express this as an 'ideal' and would accept longer periods (hours)
- A very small minority feel that every 15 minutes was a little excessive and felt like 'tracking'; they want to know the rationale behind this frequency
- In an ideal world, customers in all segments (particularly Metered customers) would like to access the data any time on an app
- But many admit they don't need this amount of detail and tips of how to better conserve water with monthly usage would be adequate



15 mins is adequate time to collect data and send to UU. Even every hour is fine as long as its doing the job its supposed to do.

Male, 35-54, Merseyside, Business



Having then read as often as 15 minutes can be very beneficial for things like leaks as well to catch them early.

Male, 18-34, Greater Manchester, Future Bill Payer



I love that it take readings every 15 mins gives me an idea of doing different things in the house and how much water it uses and costs me.

Female, 18-34, Merseyside, Metered



Hourly is good, 15 mins better. Potentially live? I think the more frequent the better to get engagement.

Male, 18-34, Greater Manchester, Landlord



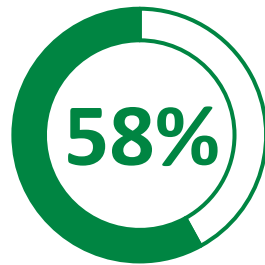
15 minute readings would be useful if the household could easily access the meter to see the cost rising so that they are aware that what they have just been doing is causing this

Female, 35-54, Merseyside, Unmetered

How to communicate the rollout?

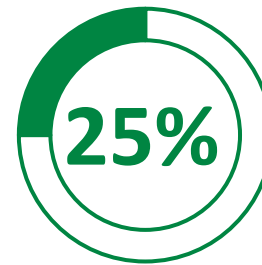
Across all groups, the rollout is understood and accepted because it is generally seen as force for good

30 customers 'strongly support' the rollout



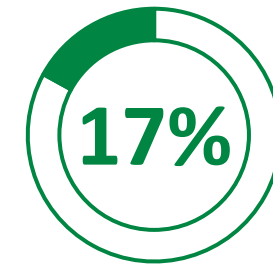
- Many customers strongly support the plan because they believe it is cost effective and reduces the environmental impact of wasting water
- They are already bought into the rationale behind water meters and their concerns about the technological upgrade is minimal
- Some support the rollout of digital meters and appreciate that they are a good idea, however may still choose to not personally have one

13 customers 'somewhat support' the rollout



- These customers support the rollout of digital meters
- However, they have a range of concerns (we will discuss these shortly)
- Some do not want to take the responsibility upon themselves to get a digital meter but are not ideologically opposed to the rollout

9 customers 'somewhat reject' the rollout



- These customers reject the rollout completely
- They do not want smart meters tracking their usage, the chance of their bills rising
- They also do not think it will be an effective method to reducing water wastage

Metered households, Landlords and Businesses generally show the strongest support for the rollout

In your opinion, does the plan to roll out digital meters make sense?



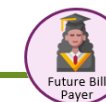
Digital is the way forward. and have to be effective. I would not want a meter, but I am happy to share my data.

Male, 55+, Greater Manchester, Unmetered



While many Unmetered customers are hesitant to adopt a digital meter because of concerns of increased bills, many ideologically accept the rollout

Though these customers do not want meters in their home, they believe that the rollout is fundamentally a good idea

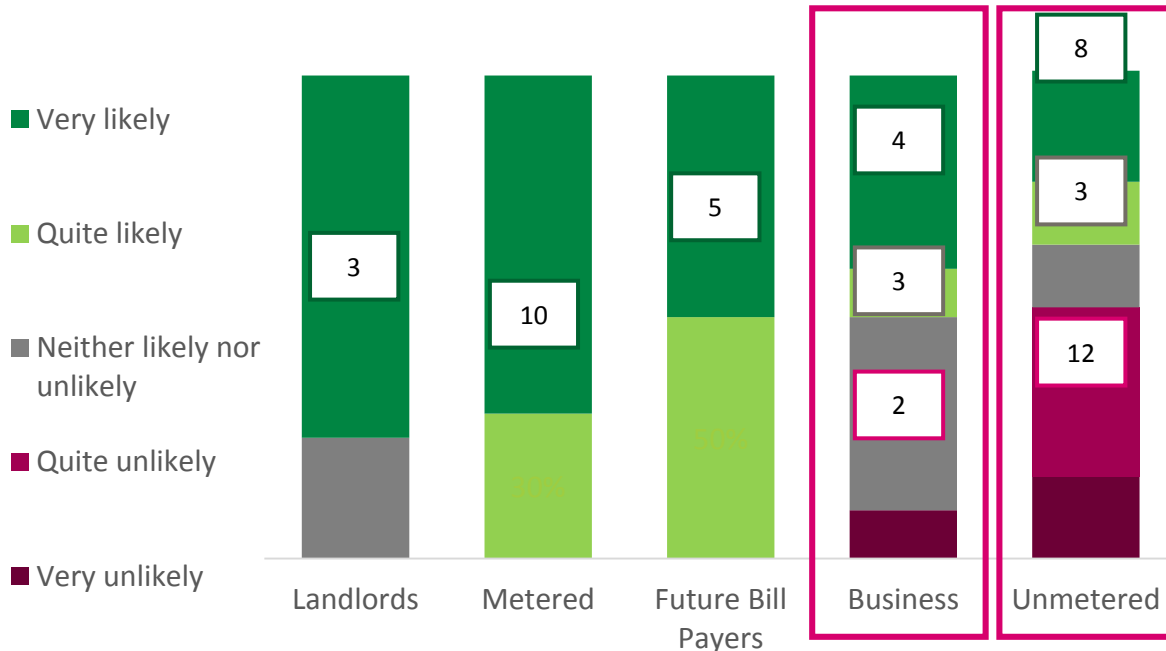


All other segments view this as a natural progression in technology of a concept (meters) they already support and have minimal concerns

However, in terms of personal uptake, the informative material in its current form is not persuasive for all groups

Overall, how likely do you think you would be to **install a digitally enabled water meter as part of the United Utilities rollout**, based on everything you have read throughout the community?

Results are indicative, interpret cautiously, low bases (N=52)



Perceived increase in cost remains a barrier for the Unmetered group & some Business customers:



Many Unmetered customers remain concerned about increased bills as a result of going metered in general (not necessarily digital)



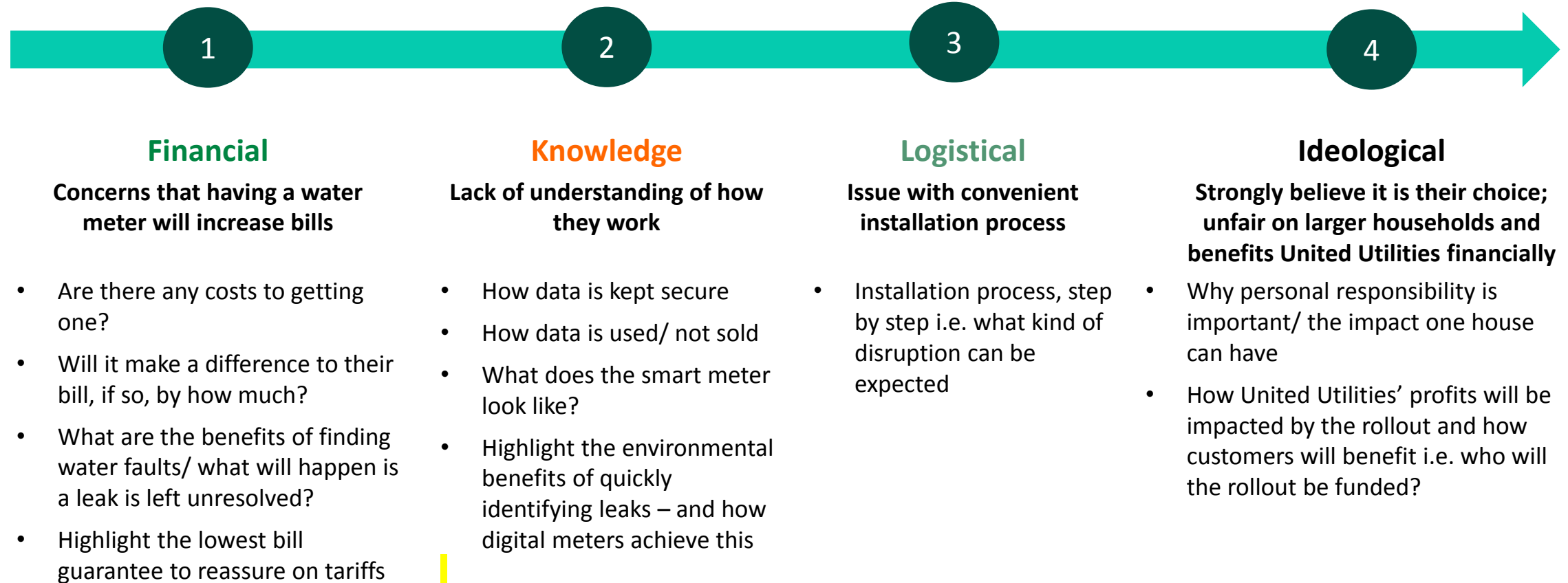
Pushback from Businesses stems more from concern that they will need to pay for an upgrade to a digital meter (via initial installation costs or increased bills)



In order to convince steadfast opponents, informative materials should prioritise messages about cost: for the Unmetered, talk about the lowest bill guarantee; for Businesses, reassure on how the digital rollout is funded (no installation costs / impact on bills)

To ensure the rollout is not dismissed as ‘a nice idea’ we recommend future comms have a dedicated Q&A section to alleviate concerns

Message priority



'Smart meters' have familiar and positive connotations as a name, and a multi-channel comms approach is felt to be optimal

Customers are familiar with 'smart' technology in their homes/businesses. Therefore they understand what to expect when they hear the term 'smart meter' and this is broadly seen as positive.

However, familiarity with other smart energy meters means United Utilities should be specific that it is a 'smart water meter'

Advice given from customers was generic but many believe a large scale campaign is essential to overcome aversions to adopting meters in general while instilling greater individual responsibility

This includes having a multi-method rollout to benefit those having different preferred methods of information retrieval



- Using social media is a quick way to have widespread information rolled out to a large amount of customers



- TV campaigns are found to be successful. Some find the United Utilities current ad campaign to be an effective way of spreading information



- Leaflets could be included with customers' monthly bills. Not everybody is tech savvy or has access to the internet and therefore the option of receiving a physical leaflet may be beneficial to some. The leaflets may also be sent over email

*I think that presently **United Utilities have a good ad campaign** to educate us on saving water, maybe include the benefits of a digital meter, this would **make us more aware of how we can continue to save water, save money and preserve the water supply.***

Female, 55+, Greater Manchester, Landlord

*United Utilities should communicate the rollout **with customer bills to reduce unnecessary mail/marketing as well as digitally.***

Male, 18-34, Greater Manchester, Metered

*I think United Utilities should communicate by **advertising the idea on tv, social media, email and letters.***

Female, 18-34, Cheshire, Unmetered

Executive Summary

What do customers think of the benefits of smart meters and are they willing to have one installed?



All customer segments generally support the rollout of digital water meters



However, some Unmetered household customers and Businesses are hesitant to install a water meter in any case, which leads to hesitancy in installing digital water meters

Why

- They appreciate the benefits of ensuring their bills are fair and accurate and the advantages (both personally and more broadly) of identifying leaks
- They accept that collectively, this will have a positive impact on the environment (Future Bill Payers see this as the greatest benefit)
- There is some concern surrounding the technology upgrade that digital meters represent to customers

Why

- Some Unmetered household customers can't look past their financial worries about meters in general
- A small cohort also fundamentally distrust water companies and think the only real rationale for meters (including digital) is profit at the expense of the customer
- Some Businesses (non-water dependent) are also wary of upgrading. They question whether the upgrade may cost them money or cause inconvenience



- Objections are almost entirely focused on cost concerns mixed with some uncertainty as to how much time this will take to set up
- United Utilities can focus messaging to mitigate concerns of cost and convenience with the knowledge that concerns around the technology itself are minimal
- As support for this is widespread, it suggests that further communication of the importance of personal responsibility may help to convert some of the currently Unmetered customers

What are the barriers stopping customers from installing smart meters?



The main barrier is concerns around smart water meters resulting in greater costs to the customer



There are also concerns about how long the installation will take, and a need for assurance their data will be kept secure

Why

- For those on a meter, they want to know if the costs of the rollout, directly, or indirectly will impact them, and if so, to what extent
- For Unmetered customers, they are concerned they will be financially impacted, directly or indirectly, through their bill. They believe that it will work out cheaper (or at least more predictable) to pay a fixed amount than be charged based on consumption (especially true of those with families)

Why

- Customers want clear communication on what the installation process looks like to understand what kind of disruption can be expected
- Customers want to be reassured (particularly Businesses)
 1. How data is kept secure
 2. How it can be used
 3. Can it be sold/ easily accessed by the wider public? (i.e. assurance there is no way the data could negatively effect reputation in anyway)
- Since digital meters rely on electricity, some worry the meter may lose functionality if their electricity or internet connection is interrupted



- Highlight the lowest bill guarantee, with added assurance of a relatively effortless installation process
- Future comms should also acknowledge minor concerns about data security and how the device itself will have virtually no impact on electricity consumption

What is customers' overall assessment of the smart meter proposition? They like it!



Fair and accurate billing is the most appealing feature of digital meters for Metered and Unmetered households



Leak identification / offering plumbing support is the preferred benefit for Businesses of the propositions tested

Why

For households, cost of living is their immediate and by far, biggest motivator: these groups are drawn to accurate billing as they consider it important to pay only for what they use

- Identifying leaks was seen as a potential money saver and customers also appreciated the broader impact they have on the environment and society at large
- It should be noted identifying leaks is not top of mind. This audience were provided details about how the need to prevent leaks is paramount

Why

- These audiences are enthusiastic about this idea; it taps into what they care about most: *'how will this save me money and time?'*
- Other initiatives tested were less popular with this group (data analytics of water usage, visualisation of data, water saving devices and frequent water audits)
 - They are not dismissed per se but again raise the question *'how will this work and how does this save me money and time?'*



- Customers demonstrate increased appreciation of the personal & broader benefits of identifying leaks, and the role digital meters can play in fixing these sooner – a potential comms hook
- Additional features need to clearly demonstrate how they will deliver on reduced cost and saved time

Internal installation and frequent data updated are preferred by most customers



Overall, almost three quarters of the sample would prefer to have a meter fitted internally rather than externally



All segments would ideally want the data to be updated approximately every 15 minutes i.e. be up to the minute as possible

Why

- Lesser costs for both the customer and United Utilities compared to external meters (again, bearing in mind the detail of this had been communicated as part of the research process)
- This provides United Utilities with a better signal strength which ensures more accurate billing
- They are safer from vandalism and the elements
- No apparent concerns about United Utilities access to the property for maintenance purposes

Why

- All segments are aligned in their thinking: the more frequently readings are taken, the more accurate the data will be and this ensures the fairest/ most accurate bill possible
- However, many express this as an 'ideal' and would accept longer periods (hours)
- **All segments are likely to accept being updated of usage in their monthly bill, but ideally would access the data whenever they wish**



- Customers demonstrate increased appreciation of the personal & broader benefits of identifying leaks, and the role digital meters can play in fixing these sooner – a potential comms hook
- Additional features need to clearly demonstrate how they will deliver on reduced cost and how time / effort will be minimal

How best to encourage customers to install smart meters?

Convey an 'immediate' motivating benefit

- Tendency for consumers to chose immediate rewards, rather than future-focusing ones
- Need to convey an 'immediate' benefit to make them more motivating

Be cognisant of consumers' money worries

- The messaging needs to take account of monetary concerns as this appears to be most customers' main focus right now
- 'Lowest bill guarantee' will be an important message here

Instil a greater sense of collective responsibility

- Messaging should acknowledge the mindset 'there is little I can do' and through an empowering narrative, motivate customers to 'do their bit' to better combat climate change
- *'Ensuring there is a safe and plentiful supply of water for the next generation'* is a strong message

Tap into what is most motivating (and concerning) for each audience

- All other audiences bar Future Bill Payers are heavily motivated by monetary gain
- For Future Bill Payers, the environmental benefits are compelling
- Logistical and ideological concerns are mainly secondary amongst households, but of greater concern amongst some Businesses

The WaterTalk panel

- Water Talk is an online community designed to reflect the views of those in the North West who have access to the internet (circa 90% of the population)
- Customer panels typically provide a deeper level of engagement with customers than ad-hoc pieces of research
- It provides rapid research access to United Utilities customers
 - This can provide fast and cost effective feedback on a wide range of issues
- Where appropriate, work is supported with other methodologies and samples to represent those not present on WaterTalk
- Nearly 8,000 United Utilities customers are on the panel:
 - 3,600 have taken part in a research activity in the last 6 months

To find out more about using the WaterTalk panel to meet your business needs, please contact **Shy Sharma** or another member of the Insight Team:



Shy Sharma

Head of Customer Insight
Shy.Sharma@uuplc.co.uk



Jenny Fathers

Customer Insight manager
Jenny.Fathers@uuplc.co.uk



Jessica Collier

Customer Insight Executive
Jessica.Collier@uuplc.co.uk