



Department for  
Business, Energy  
& Industrial Strategy

# SMART METER CUSTOMER EXPERIENCE STUDY

Executive Summary



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# SMART METER CUSTOMER EXPERIENCE STUDY

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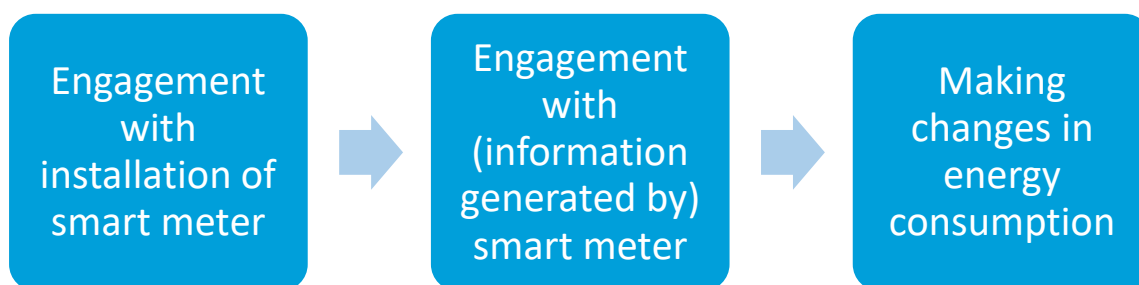
# Executive Summary

## Background and aims of the research

The Government is committed to ensuring that every home and business in the country is offered a smart meter by the end of 2020. Smart meters are the next generation of gas and electricity meters and communicate directly with energy suppliers. They are consequently expected to deliver a range of benefits for consumers. These include removing the need for manual meter reads, ending estimated billing, making switching between suppliers smoother and faster, and helping consumers take control of their energy consumption by providing them with near real-time information on their energy consumption (via an In-Home Display (IHD)).

The Department for Business, Energy and Industrial Strategy (BEIS) commissioned Ipsos MORI to undertake a longitudinal research study to explore consumer experiences of smart metering over time; beginning with their decision to get a smart meter, through the installation process itself (including demonstration of an in-home display and energy saving advice provided by the installer), to almost one-year after installation.

This research has served to test, update, and further validate, the evidence base on customer experiences and impacts produced earlier in the roll-out by the Early Learning Project.<sup>1</sup> In particular, the ELP research identified three transition points that consumers must pass through in order to make lasting changes to their energy consumption:



Another aim was to capture the impact of developments in the roll-out since the ELP, including the implementation of the Smart Meter Installation Code of Practice (SMICoP)<sup>2</sup>, Smart Energy GB's establishment and communications campaigns, and an expanding smart meter population, with smart prepay meters now being rolled out at scale.

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<sup>1</sup> DECC, '[Smart Metering Early Learning Project and Small-Scale Behaviour Trials](#)', 2015.

<sup>2</sup> Ofgem, '[Smart Metering Installation Code of Practice \(SMICoP\)](#)', 2013 (latest version 2018).

### Research method and interpreting the findings

The primary data collection method was a representative, two-wave telephone survey of customers of two GB energy suppliers who had smart meter installations in January and early-February 2017. The first wave (the Post-installation survey) was carried out within approximately 3 months of the installation, with the second (the Follow-up survey) almost a year after the installation.

Alongside the Follow-up survey, 50 in-home, in-depth interviews were conducted with a mix of customers from the Post-installation survey sample.

This report presents a synthesis of the evidence from these surveys and interviews.

Whilst this research enables readers to understand and learn from the experiences of a wide range of smart meter customers, it should be remembered that the customers involved may not be typical of the wider population. This is because they were customers of two UK suppliers who had smart meter installations at a specific time in the roll-out. Their findings may not reflect the likely experiences, attitudes and behaviours of the wider smart meter population, or those who are yet to get a smart meter.

### Levels of satisfaction among smart meter customers

Nine in ten Post-installation survey respondents (89%) said they were satisfied with the installation of their smart meter.

Satisfaction with the overall smart meter experience was high and also sustained across the year. Three-quarters (74%) of Follow-up survey respondents said they were satisfied with their smart meter and only 11% said they were dissatisfied. Just after installation, eight in ten (80%) said they were satisfied and only 7% were dissatisfied.

Three-quarters (76%) of Follow-up survey respondents gave a score of 6 out of 10 or above for likelihood to recommend a smart meter to a friend, family or colleague recommend a smart meter to a friend, colleague or relative, and 14% gave a score of 4 or below.<sup>3</sup> Again, this was largely sustained across the year, when eight in ten (80%) gave a score of 6 or above and 8% gave a score of 4 or below.

Satisfaction was attributed by qualitative interview participants to the increased visibility they now had of their energy consumption and the increased convenience their smart meter brought them. Key Drivers Analysis found that frequent use of the IHD and satisfaction with the installation visit were strongly associated with overall satisfaction. The provision of energy efficiency information, either through follow-up contact from the

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<sup>3</sup> 'On a scale of 1 (definitely would not recommend) to 10 (definitely would recommend).

supplier or during the installation of the smart meter, was also shown to be related to satisfaction nearly a year after the installation.

Prepay respondents were among those most likely to be satisfied with having a smart meter (80% of prepay Follow-up survey respondents, compared to 73% of credit respondents). They were also less likely to say they were dissatisfied with their smart meter (7% of prepay Follow-up survey respondents, compared to 12% of credit respondents). Prepay respondents were also more likely to give a score of 6 or above for likelihood to recommend a smart meter (83%). They were also almost twice as likely to give the maximum score of 10 out of 10 (60%, compared to 35% of credit respondents). Only 5% of PP respondents gave a score of 4 or below (compared to 14% of credit respondents).

Being able to more easily monitor their credit balance and access to more convenient and flexible top-up options were key reasons for high levels of satisfaction among prepay participants. Nearly nine in ten (88%) prepay respondents said that topping up had become easier since the installation of their smart meter (and 86% said it had become a *lot* easier). Subsequently, prepay qualitative interview participants often felt much more in control of their balance and consumption, and some noted they less frequently used emergency credit as a result.

### Use of In-Home Displays (IHDs)

Uptake of the IHD offer during the smart meter installation was near universal; 95% of survey respondents reported accepting the offer (of 92% who re-called being offered one).

Nearly a year after installation, around eight in ten (80%) IHD owners said their IHD was still plugged in and in-use; a modest decrease from the nine in ten (88%) who said the same just after installation.

Just under half of IHD owners reported that they looked how much energy they were consuming at least weekly (45%), a decrease from two-thirds earlier in the year (67%). Similarly, three in ten (29%) said they looked at it most days, down from just over four in ten (43%). Seven in ten (70%) continued to engage with their IHD in some way nearly a year after their installation, down from eight in ten (82%) just after it.

Key Drivers Analysis found that consumers were more likely to frequently use their IHD if they had received printed information about energy efficiency at their installation, or if they had received tailored energy efficiency advice from the installer based on their responses to questions about their home and energy consumption habits. Receiving a demonstration of each screen of the IHD at the install and having used the IHD to set a household baseline were also associated with being a frequent IHD user.

A perceived lack of ongoing need for the information shown on the IHD was the most common reason for disengagement. Although some said it was because they did not understand how to use the IHD, it had stopped working or they were using an app instead.

### Use of other smart meter-enabled devices

A quarter of Follow-up survey respondents (26%) said they had downloaded an app offered by their energy supplier. This was far more prevalent among prepay respondents (70%) than credit respondents (19%).

The primary use of apps was by prepay respondents for topping-up their credit balance. Of those with an app, 83% said it was the most frequent way in which they topped up. Across all prepay respondents, 57% said that they most frequently topped up via their app, 26% said they did so via a shop/PayPoint outlet and 13% said they topped up online.

Only 9% of credit app owners said they looked at energy consumption information on their app at least weekly.<sup>4</sup> Seven in ten (69%) said they never did this. However, just under half (48%) of prepay respondents said they checked energy consumption information *or* their credit balance on their app at least weekly, and only three in ten (31%) said they never did this. The qualitative interviews suggested this difference was because prepay customers were already using the app for the 'essential' top-up function, which made it convenient for them to also use it to monitor their consumption.

### Impact of smart meters on understanding of energy consumption

Just over half (53%) of Follow-up survey respondents felt that their understanding of their energy consumption had improved over the year. Almost all of these (91%) attributed this at least partly to having a smart meter – meaning just under half (47%) of all Follow-up survey respondents felt their smart meter had helped improve their understanding of their consumption. PP respondents were among those most likely to report their understanding to have 'improved a lot' (31% compared to 18% of credit respondents).

Key Drivers Analysis additionally found that frequent IHD engagement (by looking at the traffic lights on the IHD) and having received follow-up contact from an energy supplier which allowed further questions to be asked about using the smart meter and IHD were strongly associated with reporting an improved understanding of energy consumption.

The interviews also found that in some instances where energy saving advice or follow up support was not received, participants felt less able to learn more about their household energy consumption. They felt they needed this guidance to help them get the most out of

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<sup>4</sup> The apps available to the participants in this study had the capability to provide information on energy consumption covering up to a day before the current date. It is important to note that this differs from IHDs, which present consumption information in near real-time.

their smart meter, and as a result, felt dissuaded from engaging with their IHD or app. This may be why those who received follow-up support were more likely to feel their consumption understanding had improved.

Many qualitative interview participants also said their smart meter had improved their sense of control over the year. Participants identified four key ways in which smart meters had helped give them an improved sense of control:

- providing reassurance over accuracy of bills or for prepay customers their remaining credit balance, which helped them avoid running out of credit unexpectedly;
- providing immediate feedback on energy consumption to help them reduce wastage;
- helping to control others' consumption;
- and more flexible top-up options for PP customers, which also helped keep them in credit by making topping-up easier.

### Impact of smart meters on energy consumption behaviour

More than six in ten (62%) Follow-up survey respondents felt that having a smart meter had made a difference to how they use energy in their home.

Key Drivers Analysis found that reporting this was strongly associated with frequent IHD use (or app use for some prepay customers), as well as the respondent having proactively requested their smart meter installation.<sup>5</sup> Again, having received printed information about how to save energy or follow-up contact inviting further questions on how to use the smart meter and/or IHD were also associated with this outcome.

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<sup>5</sup> Customers were most likely to report that their smart meter installation had been initiated by their energy supplier (71%), rather than by themselves.

### Conclusions

#### **Most customers were satisfied with their smart meter experience – and this is consistent with earlier in the rollout**

High levels of satisfaction were recorded regarding both the smart meter installation (89%) and the overall smart meter experience (74% nearly a year later). Satisfaction was also sustained throughout the year (80% satisfied just after installation).

These high levels of satisfaction were also very similar to those recorded by the ELP, which was conducted with customers who had installations between 2011 and 2013. Thus, this research indicates that positive customer experiences have been maintained as the rollout has expanded in both size and diversity, with prepay customers now included at scale and more of those in more vulnerable circumstances also included. This is positive evidence to suggest the rollout is effectively engaging a wide variety of customers and households in smart metering.

#### **Smart prepay customers were especially satisfied and found their smart meter experience to be transformative**

This study also found an especially positive experience amongst prepay customers, which is encouraging given that they are more likely to be in vulnerable circumstances.

Smart meters have the potential to bring significant benefits to prepay customers in the improved visibility of consumption information, which can help them keep on top of their credit balance and consumption, and the increased convenience provided by new flexible top-up options and reducing the need to interact directly with their meter, which can often be in inconvenient places. The study found that many prepay customers were realising these key benefits and were consequently strong advocates of smart metering.

#### **The importance of social influence**

The study also highlights the importance of social influence in the uptake of smart meters. After energy suppliers, word-of-mouth was the most commonly cited source of pre-installation information about smart meters. Prepay and vulnerable participants in particular often said they had heard about the benefits of having a smart meter from people they know, and some said they had begun to spread the word about these benefits themselves after getting one.

Ensuring a consistently high-quality customer experience of smart metering can be expected to increase consumer support and uptake, and negative experiences could have the opposite effect.



### **Uptake of the IHD offer remains very high, with a relatively small fall in use over time**

Also in line with the ELP, uptake of the IHD was near universal, with 95% accepting the offer (of the 92% who recalled it), demonstrating the continued popularity of the offer.

Interestingly, this longitudinal study found that in the first year of IHD ownership, the 'novelty effect' around IHDs was arguably modest, with a relatively small decrease in the number saying their IHD was plugged in and in use (88% to 80%).

In line with what previous research has suggested (such as the Early Learning Project), there was a trend of less frequent IHD engagement throughout the year. Just under half of IHD owners reported that they looked how much energy they were consuming at least weekly (45%), a decrease from two-thirds earlier in the year (67%). However, only a small proportion ceased to engage with their IHD altogether. Seven in ten (70%)<sup>6</sup> continued to monitor their consumption on their IHD to some extent.

### **Use of smart meter-enabled apps was limited overall, but was a core part of the experience for prepay customers**

Although not prevalent amongst credit respondents, smart meter-enabled apps were in widespread use across prepay respondents and formed a core part of their experience. The use of the top-up feature was the primary reason for this, with eight in ten (83%) prepay respondents with an app reporting it was the top-up method they most often used.

The use of apps to check historical consumption was low amongst credit respondents that had an app (9% at least weekly) but was far more likely amongst prepay respondents (48% at least weekly). The qualitative research suggested that this was because they were already using the app to top-up and monitor their balance. They were effectively using their app as a 'one-stop-shop'.

This importance of this is that because these customers were already using their app for an 'essential' purpose, they were more likely to be making use of the other features. Given the high usage of apps across the prepay customers in the Follow-up survey, existing apps could be a promising vehicle for delivering future support or services to prepay customers.

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<sup>6</sup> This remaining 30% includes the 20% who said their IHD was unplugged and 10% of IHD owners who said they do not look at how much energy they are consuming on their IHD, despite it being plugged in.

### **Many reported consumption understanding improvements and impacts on their consumption behaviour**

Almost half (47%) of Follow-up survey respondents said their smart meter had helped improve their understanding of their energy consumption over the year. Additionally, more than six in ten (62%) felt that having a smart meter had made a difference in some way to how they use energy in their home.

### **Effective guidance and support during and after installation are essential to enable consumers to realise benefits**

Receipt of high-quality advice during the installation was routinely associated with positive outcomes, including overall satisfaction and IHD engagement which in turn was associated with improved understanding of consumption and changes to household behaviours.

A feeling that the guidance and support provided was ineffective, either because it was limited or not felt to be useful, was a common theme in reasons for dissatisfaction or limited impact throughout this study. This referred to both demonstrations of IHDs (and apps where relevant) and energy saving advice.

Follow-up contact was also commonly associated with positive outcomes, and there was still an appetite for information about how to reduce consumption amongst many survey respondents after a year with a smart meter. Also, some qualitative interview participants, including those in more vulnerable circumstances, felt that follow-up contact would help address gaps in their knowledge left by poor guidance during installation. These findings suggest that follow-up contact could be a useful tool for helping more customers get the most out of their smart meter.

### **Effective advice and guidance is necessary but not always 'sufficient'**

Although a lack of advice and guidance was often associated with a lack of impact, it is important to note that there were also other common reasons. For example, IHD aesthetics were sometimes cited, as were the limitations in the depth of information provided by IHDs, with some feeling that appliance-level consumption would have been more actionable and an improvement which would have encouraged them to make more use of it.

Some also felt that they were doing all they could to save energy. To the researchers, it was clear that some interview participants were underestimating their ability to do so, and guidance or support could help. However, for others it reflected a lack of interest or motivation.

This study indicates that a range of factors - including (but not limited to) the provision of effective support for all consumers - need to be considered in seeking to maximising the positive impacts of smart meters.