

IMP0606 Project Avatar Discussion Guide 2 Commercial

Objective-

- Defining Customer Needs and Expectations
- Explore innovation in customer experience
- Understand concerns on data sharing
- Introduce customer contact scenarios (that will be followed up to demonstrate the prototypes in ECP 3). Explore what would be important to the customer in these scenarios, and any concerns (and how to address them).

GROUP STRUCTURE (1½ HOURS):

AREA OF DISCUSSION	TIME ALLOCATION	START TIME
1. Introduction	10	
2. Reminder last week’s discussion		
3. What does great customer service look and feel like?	15	
4. Emerging technology	15	
5. Smart home and smart grid of the future	10	
6. Concerns about data sharing (sorting exercise)	15	
7. Customer contact scenarios	20	
8. Thanks	5	

1 Moderator Introduction (2 – 3 minutes):

- Re-introduce yourself
- *Explain purpose of discussion (how ENWL use largely traditional methods to interact with their customers now, how they are harnessing new technology and how they could embrace emerging technology to improve the way that they interact with their customers in the future, to improve customer service).*
- Confidentiality is guaranteed, no right / wrong answers, interested in everybody’s opinions, in as much detail as possible

Warm-up

- What were the **key things you remember** regarding the last session?

MODERATOR READ OUT:

During the last meeting we discussed Electricity North West's responsibilities for operating and maintaining the electricity distribution network. We also discussed how the way we are using electricity is changing, driven by carbon reduction targets, new low carbon technology (LCTs) - such as solar panels and electric vehicles - and new forms of electricity generation. We covered how these technologies will have an enormous impact on Electricity North West and the service it provides in the future. Today we will continue our conversation about the customer service provided by Electricity North West and how this might change in the future with the development of technology and new methods of communication.

2 What does great customer service look and feel like? (15 minutes)

In preparation for this evening's meeting, we asked you to think of an experience you have had with an organisation and receive a 10/10 customer experience.

MODERATOR: ASK FOR 3 OR 4 PEOPLE TO SHARE:

1. Which organisation you had contacted?
2. How did it **exceed** your expectations?

PROMPT on:

- Did you actually speak / email/ interact with a person or was the information you received from an automated source?
- What was it about the information you received that you remember as being particularly good?
- How did this **exceed** your expectations?

MODERATOR: ASK THE GROUP:

- What are the things that make a bad customer experience?

MODERATOR: CHOOSE AN EXAMPLE FROM THE HOMEWORK WHERE THEIR EXPERIENCE WAS MADE BETTER THROUGH A COMPANY HAVING YOUR DATA SHARED. IF THERE ISNT ONE MODERATOR SHARE OWN EXAMPLE (FOR EXAMPLE MOBILE PHONE COMPANY SUGGESTED A BETTER DEAL FOR OWN PERSONAL USE)

Last time we talked about how in the future there will be a lot of data available about us and our household/ businesses that could make our life easier and also potentially could be shared with organisations so they have an increased understanding about you or your behaviour. For example smart meters or Hive smart heating.

DISCUSS THE EXAMPLE WHERE DATA SHARING ENABLED BETTER CUSTOMER SERVICE, - HAS ANYONE ELSE HAD AN EXPERIENCE LIKE THIS?

-What else in your life is already better as a result of sharing data?

3 Emerging technology (15 mins)

In the future, it is predicted that your business will be increasingly interconnected, both between appliances and your phone, and to external companies through your smart meter and other technologies.

MODERATOR: SHOWCARD A (Qualify that this is about the home, but there are similar implications for a business)

We are already starting to see technology, such as the Amazon echo (Alexa) and Google home, become increasingly common place in peoples' homes. Last Christmas the Amazon echo dot was the bestselling product on Amazon, and the Amazon echo app was top of the app download charts with tens of millions sold. **MODERATOR:** SHOWCARD B is the share that amazon had on the market, indicating their dominance.

Who has a smart meter? At home or work? How does it affect your life/what do you use it for?

Who has an Amazon echo or Google home or work? How does it affect your life/what do you use it for?

Wants one of above in the future?

Both Amazon echo and google home collect large amounts of data. Why is there more appeal of Amazon echo/google home (assuming this is the case in the group, if not point out that there have been huge sales for Alexa whilst government targets for smart meter uptake is not going to be achieved?)

What else would a smart meter need to do to have same level of appeal?

We have one of the latest version of an Amazon echo here: the Echo Show. As well as being able to talk to it, it can now show you videos, pictures, security camera feeds on it etc.

MODERATOR DEMO: Get respondents to ask questions to the Echo Show (with a clause to keep it clean, sensible and not to make a purchase!!!!).

What are your initial perceptions of having an Alexa in the home, would you get one? What is stopping you getting one?

Ok, so let's show you examples of where other utility companies are starting to interact with this type of technology to make their customers lives easier

EDF have launched a tariff which includes an Amazon Echo and smart thermostat which allows for a range of services to be provided. **SHOWCARD C**

Can you think of how ENW could also use this to create a better experience for its customers?

MODERATOR: Possible examples could be to store energy before a planned power cut (using battery storage discussed last time, reporting an unplanned power cut to ENW...) **USE FLASHCARD PACK A**

4 Smart home and smart grid of the future (10 mins)

If possible get the Echo show to load up the following video, or show via laptop
<https://www.youtube.com/watch?v=JwRTpWZReJk> (if not show it on laptop)

Any questions? Any further thoughts on how smart technology could make your life easier? Any further concerns?

5 Concerns about data sharing (sorting exercise) (15 mins)

The topic and concern of data sharing has been mentioned throughout these sessions.

Thinking about your concerns with data sharing, specifically around smart meters, I would like you write down all the concerns that you have, or that others may have, about sharing data in this way with energy organisations. Please be as specific as you can.

Then please sort them into one of three piles: Are not much of a worry to you, a slight concern, a big concern (probably a barrier to you getting a smart meter in the future)

MODERATOR: Get the groups to feedback on their answers, identify some common themes in large concerns.

What would it take the group to no longer be concerned e.g. an advancement in technology, communication from those using the data, controls that they have over the smart meter and other technologies and what their information is used for.

Last time we met, we shared a video about the roll out of Smart Meters across GB and we would like to look now at the data that these would gather.

SHOWCARD D

6 Customer contact scenarios (20 minutes)

Scenario for Prototype One – Smart Hub/Digital Energy hub

We talked earlier about how homes are becoming ‘Smart homes’ with assistants such as the ‘Amazon Echo (or Alexa)’ and ‘Google Home’ letting people control their devices through voice recognition whilst in the home and also remotely for example adjusting the heating whilst you're out, or lighting a room as you enter.

This will also be the case in businesses, with a ‘smart workplace’ becoming common place. Even if your business isn't yet hard wired for smart devices, these home assistants let you have control over switching devices on and off, from almost anywhere in the world, simply by having your wifi connected to a smart plug. These systems can also tell you how much energy your business is consuming.

I would like you to think about what other information would be helpful in order **to gain even more control over your businesses energy consumption in the future?**

TYPICAL BUSINESS SHOWCARD E FOR SME GROUP:

Here is an example of a business from 2028. Jon employs 30 people at his graphic design company, it is situated in a business park on the outskirts of Manchester. There are solar panels and a small wind turbine which generate the majority of the electricity which the company needs. They also have an electric heat pump as their air conditioning/ heating system. Many of of Jon’s employees work from home much of the time and most of their meetings are virtual but some employees still need to travel to the office. Due to the location, the majority of these employees drive their electric cars to work, and there are 10 parking spaces with charging capabilities. Peak usage is between 10am—3pm when electric cars are charging, staff are on their laptops and the heating/cooling is being used. For Jon’s company energy is not just something they consume from a supplier, but also something they can generate and use or sell. They also have a battery storage device, which means that they can store the electricity that their solar panels generate to use when they need it. If they don’t use it, they can sell it back to the network company, so for the most part, their electricity is almost independent of the traditional mains supply.

What information would help Jon understand more about the businesses energy consumption? **USE FLASHCARD PACK B**

PROBE:

- What type of electricity consumption information would be useful for the business to know?
- What would they **need** to know? **PROBE** *Information about consumption on a room level, or by device? Would it be useful to have past, current or future predictions?*
- What would they do with this information?
- What would they **NOT need** to know **PROBE:** *Any concerns (for example security?)*
- How would this information be **communicated?** **PROBE:** *Channel, proactive vs reactive?*
- How would having access to this information make Jon **feel?**
- **Would you expect the smart hub to keep an ‘audit trail’ of the communication and have this available to you? Would this be a benefit?**
- Would access to this information be financially beneficial to Jon and his business?

Scenario for Prototype Two – Communication channels

We talked when we last met about supply interruptions or power cuts, and how currently, Electricity North West communicates with customers when there is a planned or unplanned power cut.

TYPICAL BUSINESS SHOWCARD F FOR SME GROUP

Let's imagine an unplanned power cut happens to Jon's business, again in 2028. This occurs late afternoon, at the busiest time for the company, when they all rely on electricity the most. It is winter, it's cold outside and it's starting to get dark. There are many deadlines due today and staff need to work well into the evening to complete them. They need software only accessible at the company, and important video conference calls with a prospective new client are also scheduled for this evening, which rely on wifi. As it's now getting dark, Jon can't rely on his solar generation.

Jon is communicating with Electricity North West via a 'business hub', similar to the Alexa hub we have just seen. Jon is quickly able to receive an answer to his questions about the power cut and enables the battery storage which has been stored largely from what his solar panels generated over the weekend. This ensures that there is enough electricity for the conference calls and other time sensitive work that might be completed on site that evening.

PROBE:

- What type of information would it be useful for the business to know?
- How would this information be **communicated**? **PROBE** *Proactive versus reactive? By what method – visual or spoken? When? Initial reactions to voice interactive platforms and holographs?*
- How would it make Jon feel if he received information in this way?
- **PROBE:** *Any concerns (for example security?)*
- **PROBE:** *Any types of business which might need to receive information in a different way? Prompt on specific businesses, e.g. large industrial customers, those caring for vulnerable customers, those heavily reliant on electricity.*
- **Would you expect the communication platform to keep an 'audit trail' of the communication and have this available to you? Would this be a benefit?**
- *Would it be useful to have this visually communicated on a map for example? On a map you could see the area affected and identify for example the nearest working EV charging point? Also on a map you track the status of the repair or track progress of an engineer on his way to fix a fault/make a connection? If you could see the workforce in real time fixing the fault, how useful*

would that be? For example seeing engineers excavating and digging the road and seeing cables, or sending a drone up to look at pylons. **MODERATOR PROBE FOR HOW MUCH INFORMATION IS TOO MUCH?**

- What situation would this be most useful in? For example longer duration faults, if away from home (for example in the office) so can decide when to go home? Any other situations? Would you want this pushed to you or would you want to log on and see it?

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Now imagine this occurs over night, when all the employees have gone home, and the power cut lasts for 4 hours. Remember that this in 2028 and Jon's business has a business hub/smart business assistant and he has an equivalent home hub at home.

How and why would the interaction with Electricity North West be different?

What information would Jon need in this scenario?

Would the business hub and home hub talk to each other?

How would he interact with them when he was out and about?

Now imagine that Electricity North West know that they are going to have to temporarily disconnect the mains electricity to Jon's local network, to carry out essential maintenance works. There is no alternative – there has to be a planned interruption otherwise his mains supply could be interrupted, without notice at any time, because without the maintenance a fault is likely to occur.

What information would Jon need in this scenario?

Is anything about the way the information should be communicated be different? What and why?

WRAP UP FOR SCENARIO 1 AND 2..

Now thinking about all the different reasons that you may be in touch with ENW in the situations we have discussed. For example, the fact the power has gone off, videos of the engineers working to fix a supply interruption

Please can we divide these into two piles – push to indicate this is information you would proactively like ENW to send to you, and 'pull' to indicate this information is something you would like to be able to easily access, but it would not need to be actively sent to you.

MODERATOR GET THE GROUP TO WRITE DOWN ALL THE DIFFERENT REASONS FOR CONTACT ON POST IT NOTES AND PLACE INTO TWO PILES (PUSH AND PULL). Also prompt on other scenarios which may have been discussed) for example information on where to charge your electric vehicle in the event of a power cut?

MODERTOR: IF TIME DO SCENARIO 3

Scenario for Prototype Three – Network Visualisation Map

When we last met, we briefly talked about how, in the future, it's likely that DNOs will need to adopt a much more interactive approach to managing a 'smart grid', moving towards a DSO model

(SHOWCARD G – overview of DSO from ECP1)

This would require DNO's / DSO's to have access to more detailed information about the electricity that is being used on specific parts of its network, to prevent faults if more electricity is being used than the network can cope with; or if there's too much electricity being generated, which can also cause problems and result in faults. This information could be provided by the likes of smart home devices such as those discussed earlier or /smart plugs & sockets, connected to the business Wi-Fi. **MODERATOR:** *Try not to dwell on provision of data by smart meters – acknowledge and move on.*

Let's use Jon's business as an example again, with the unplanned power cut scenario that happens, without notice, at the worst possible time for the business, during the day in 2028. Jon's business is based on a business park on the outskirts of Manchester, with a lot businesses in the vicinity. The majority of businesses rely on electricity, especially around this time – not everyone on this network has the same ability to generate their own electricity or has backup battery storage like Jon's business, meaning that until the problem is fixed, they have no power.

This fault was caused because the network had become overloaded. Electricity North West would be able to manage its network much more efficiently, and could probably have prevented the fault from happening, if it had access to the businesses consumption information. If customers allowed the DNO to see this information they would know what was happening, at network level, at any time, right down to

the device level in individual properties. If they could see and use this information, they would not only be able to provide a more reliable supply, but also offer improved advice and services to customers. For example *we are aware that you have a video call at 11am, so we would suggest that you divert the energy usage from the electric vehicle charging (which is at 70% capacity) and use divert battery reserve from the solar energy generated earlier to your wifi and compute. In time the DNO's systems might not just be able to suggest the best way of managing Jon's business' electricity usage, generation and storage, but automatically optimise the businesses energy needs and make these changes for him, remotely.*

The amount of consumption information potentially available to Electricity North West is likely to increase in the future as more devices become smart enabled.

PROBE:

- What are your feelings NOW about DNO's potentially having access to their businesses consumption information in the future, assuming that this would only be possible if the customer had given their explicit consent to access it?
- Do you think that as customers become more familiar with smart technology and expect more of the DNO, they might be more open to sharing this information in the future? Probe to establish if this trade off would be for an:
 - o Improved customer service
 - o A more secure network
 - o For their general ease and convenience
 - o For potential commercial gain/savings from additional services
- Assuming that Jon has allowed ENWL to see all the consumption data from his smart devices, what other types of information would it be useful for the business to know in this power cut situation?
- How should this information be **communicated**? **PROBE** *By what method? When?*
- Any concerns about this scenario **PROBE:** *Any concerns (for example security? Sharing of data, explore customers general views about smart devices effectively extending the network by providing the DNO with information sources)*
- How would it make Jon feel if he received information in this way?



7 Thank and close

Reminder on next meeting in two weeks time