United Utilities DWMP Portal UX Research

**1-HR IN-DEPTH INTERVIEWS
DISCUSSION GUIDE**

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Background & Research Objectives

In accordance with Defra's guiding principles on the Drainage and Wastewater Management Plan (DWMP), United Utilities (UU) is creating an online customer platform allowing users to view interactive maps and gather relevant information about their area in a way that is easy to use and understand. The platform shows customers data based on modelled future risks.

An early prototype of this has been developed based on previous research and is currently divided into three main pages - sewer flooding, environment and asset conditions which details the modelled future risks in each of these areas.

The prototype is ready to test with potential users to understand where it is currently successful and what further design and information enhancements are required.

Specifically, our research will answer the following objectives:

- How intuitive is the portal?
- How efficient is it (how quickly can users complete tasks)?
- How do users recover from errors?
- How satisfying is it to use (visual design, content, gestures, usefulness of content)
- What additional features are required?

Project Timings

Task	Date
Project Commission	05/05/22
Recruitment screener drafted & delivered to UU	06/05/22
Recruitment screener signed off	09/05/22
Recruitment screener scripted & in field	10/05/22
Discussion guide drafted & delivered to UU	11/05/22
Recruitment finalised & respondents selected	16/05/22
Discussion guide agreed & signed off	17/05/22
Fieldwork	18/05/22
Analysis & reporting	25/05/22
First draft report ready (Word doc of key findings)	30/05/22
Report amends	31/05/22
Full report ready	08/06/22
Debrief	16/06/22

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Discussion Flow

Please note: This is a fluid guide and flow will be partly determined by how the discussion flows in reality

- Introduction & welcome (**5 MINUTES**)

- Respondent background & DWMP context (**10 MINUTES**)

- Portal Experience: Functionality & Comprehension (**25 MINUTES**)

- Portal Experience: Design (**5 MINUTES**)

- Portal Relevance (**10 MINUTES**)

- Summing Up & Recommendations (**5 MINUTES**)

Discussion Guide

INTRODUCTION & WELCOME (5 MINUTES)

Objective: *explain research and manage expectations*

Thank you so much for agreeing to take part in this interview, we are glad you could join us today. Before the main interview, I have a few bits of housekeeping I'd like to cover

Moderator to introduce themselves

Informs respondent that they work for independent market research agency, all responses will be kept anonymous, etc.

The interview is being recorded for research purposes only and to help with writing the report, will all be kept anonymous and stored safely and securely.

If relevant: re-iterate permission for conversation to be listened to and introduce any colleagues from United Utilities

Talk through research flow

Check participant has completed/ brought the pre-task grid and explain that we will discuss this later on in the interview

Please remember, there are no right or wrong answers in this discussion, so please feel free to speak your mind

- Now we've got that out of the way, please could you introduce yourself?

- What's your name, age?

- Who's at home?

- What do you do with your time?

RESPONDENT BACKGROUND & DWMP CONTEXT (10 MINUTES)

Objective: *Ease respondent into the discussion and find out about their existing familiarity with DWMP issues*

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Thanks for introducing yourself! In today's discussion, I will soon be showing you a prototype website that may be launched in the future by United Utilities, but we're going to begin with what you already know about the company and wastewater issues. You may or may not have already participated in some research about United Utilities in the past, so some of these first questions may be a recap of what you have already discussed. Please bear with me if so:

- What do you know, if anything, about United Utilities?
    - What do they do as a company?
    - What do they do well?
    - What do they do less well?
- Have you had any prior experience / interactions with United Utilities?
    - If so, tell me about them
    - *Moderator to listen for any instances of sewer flooding, highway flooding, surface water flooding, environmental concerns etc. and probe*
- Have you had issues with water / wastewater in the past?
    - Tell me about this
    - Did you report this to UU at the time?
    - **If flooding:** where did this flooding come from? E.g. sewer? Highway? Surface water?
    - *Moderator to understand if participants are able to tell the difference between the types of flooding*
- What, if anything, do you know about water flooding & drainage issues in your area?
- What are your biggest concerns when it comes to flooding / water drainage in your area?
- Have you ever sought information about flooding risks in your area?
- **If yes:** Tell me about this
    - Where did you go to get more information about this topic?
    - How useful was this information?
    - How easy/difficult was it to obtain this information?
    - Is there anything that would have made your experience more seamless?
- **If no:** Where do you think you would go if you were to try and find information about sewage and flooding risk in your area?
    - Under what circumstance do you think you might wish to do this?
    - What kind of information would you like to see?

PORTAL EXPERIENCE: FUNCTIONALITY & COMPREHENSION (25 MINUTES)
Objective: *Get detailed feedback on the usability and comprehension of the portal, identify any areas of friction and discover what they might do if they were to navigate this portal themselves*

(Moderator paraphrase but ensure the respondent has the following information)

United Utilities are creating an online portal that will set out how wastewater systems, and the drainage networks that impact them, are to be extended, improved and maintained in the future. This portal will help customers learn about the risks and plans for the area they live in, and other areas United Utilities are looking to improve.

The portal is still in early prototype stage, and I would like to get your feedback on where this is currently doing well and where improvements need to be made.

I would like to make clear that we are not testing your technical ability or your knowledge of wastewater systems or drainage networks here. This research is about making sure that this portal is easy to use and well understood by anyone who wants to use it – for that reason, please be

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honest and detailed with your feedback. Everything you tell us will help the development team make this service the best it can be.

I will share my screen, and then hand over control so that you can navigate the prototype portal on my behalf.

Homepage

Before we get into the main part of the portal, I should note that when this is launched, there will be a homepage that will explain a lot of the context behind the portal, and the terminology included on there. The portal will also be a link from the DWMP webpage, so there will also be a lot of context provided there.

This homepage is still in early stages of construction, so the wording, look and feel will be very different to what you see now. However, I'd like you to have a read through the content on this page, to give you a little context around the portal and what it will show.

[Moderator show homepage: text on homepage for reference]:

The water you use, whether that's from your toilet flushing or from rain that comes off roofs and roads needs to be collected, treated and sent safely back to the environment. A growing North West and more extreme weather present challenges for how we manage your used water over the long term. We're planning for this through our Drainage and Wastewater Management Plan (DWMP).

This plan focuses on the future of drainage, wastewater and environmental water quality. We build this plan together with organisations that have interests and responsibilities relating to drainage, flooding and protection of the environment.

By working with other partners to plan for the future now, we can lead the way in sustainable and resilient growth in our towns and cities. It will allow us to manage the risks, mitigating and adapting to climate change, with robust infrastructure.

- Based on what you see on the homepage, what information do you expect to find in this portal?
- What do you understand is the purpose of this portal?
- Is there anything here that is/ isn't easy to understand?

Landing Page (DWMP Application)

[Moderator show DWMP Application landing page & hand over screen control to participant]

Great! Now let's move to the landing page (DWMP Application). I have a series of 'tasks' for you, where we are going to imagine some hypothetical scenarios, and see what you would do. Remember – this is not a test of your knowledge – we're just interested to see how you would navigate the portal naturally!

Feel free to take control and show me what you would do if I wasn't here. As you are doing so, I'd like you to 'think aloud', and be mindful to highlight any thoughts or comments that might occur to you, such as anything that is unclear or surprising.

- First let's imagine you have arrived at this landing page and want to find out how drainage and wastewater is impacting the area as a whole – where would you expect to find this information?
- You are aware that sewer blockages/sewer collapses may be a problem where you live. Show me how you would find this information.

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- You are interested in finding out about sewer flooding in High Legh / Blennerhasset / Melmerby / Plumbland / Embleton / Hutton Roof – show me how you would find this out.
  - *Probe: What do you think about the fact that there is no information in this area? What do you think this means? Is this an issue?*
- Using just the map (not the 'find address' box) find (insert location).
- You have heard about wastewater being released into natural waterways and you want to check which areas might be affected by this. Show me how you would find this information.

MODERATOR: For each task, use the following prompts where applicable – and remind participants to 'think aloud as they go':
- Talk me through what this page is about
- If you had to explain it to someone you knew, what would you say?
- What was your experience of finding the information?
- Where would you expect to find it? Is it where you expected?
- What are the features of the page that help to guide you to the right information?
  - *Probe on menu, use of colour, highlighting, pop-up boxes*
- What are the features of the page that you don't like or could be improved?
  - *Moderator watch / listen for references to images, typography, icons, animations, buttons & probe*
- Is there anything on the page that could be changed so that everyone can understand it?
  - *Probe on particular definitions e.g. wastewater overflows operating, flooding inside the home / outside the home*
  - How should these terms be described so they are better understood?
- What do you understand by short term/medium term/long term risk? How else might you describe this?
- What do you understand by low/medium/high risk? How else might you describe this?
- How do you feel about this information? Do you have any concerns?
  - Is there any further information you would like to receive?
  - *If they find they are in a high risk area:* How does this make you feel?
- Are there any areas where you had to read it more than once to get the meaning?
  - Any suggestions on how to make this clearer?
- *Moderator note how quickly & easily participants are able to complete tasks*

PORTAL EXPERIENCE: DESIGN (5 MINUTES)

Objective: Understand reactions to the portal design, in terms of appeal & usability

Now you've completed all the tasks, let's think a little more about the look and feel of the portal:

- What did you think of the design overall?
  - What did you like about it?
  - What didn't you like so much?
- How satisfying / intuitive was the portal to use and navigate? Think about:
  - Visual design
  - Gestures
  - Typography
  - Icons
  - Content
  - *Moderator to prompt with examples from task observations if struggling*
- In what ways did the design of the portal help / hinder you in finding the information you needed?

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- Are there any elements of the portal design that you think should be improved to help make it clearer?

PORTAL RELEVANCE (10 MINUTES)

Objective: *Explore how likely consumers would be to use the portal, and what they would use it for if they did (exploring different consumer profile needs)*

Thanks for your input so far – this is all very useful! Now we've been imagining the portal experience in hypothetical scenarios, next I'd like us to imagine the portal will be launched tomorrow, and you will have the opportunity to use it in real life.

- How likely would you be to log in to this kind of portal? Why?
  - What would encourage you to seek a portal like this?
  - What would stop you?
- What kinds of scenarios do you think you would be looking to use this kind of portal from United Utilities?
  - What information would you be looking for in these moments?
- How often do you imagine you would use a portal like this?
- What kind of device would you be most likely to use? E.g. laptop / desktop / phone / tablet?
  - How important is it that this portal should be compatible with multiple devices?
- How well do you think the current portal prototype would provide you with the information you need in those moments?
  - What kind of information or features should be added to better address your needs?
  - What kind of information do you think should be included on the homepage before entering the portal?
- What would you do after using this portal? E.g. more research? Nothing?
  - How do you think you would use this information?
  - Are there any other resources that would be interesting for you to know about after using the portal?
  - *If they find they are in a high risk area:* How does this make you feel?

SUMMING UP & RECOMMENDATIONS (5 MINUTES)

Objective: *Wrap up the interview & summarise any key considerations for the portal moving forwards*

We're almost at the end of the interview! For the last 5 minutes, I'd like you to imagine that you have the opportunity to speak to the CEO of United Utilities, and you're able to give your final recommendations for how to optimise the new website. What would you say?

- How would you summarise what this new portal is all about in your own words?
- What are the top 3 things that should remain the same about the portal?
- What are the top 3 things that should change about the portal?
- Any other final thoughts / words of wisdom?

Thank & close

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Sewer Flooding – risks that will cause flooding to areas as a result hydraulic overloading of the sewer network. This tab combines the modelled future risk for 4 types of flood occurrences:

- Sewer Flooding: **Inside the Home** - The anticipated risk flooding from the sewer may occur inside a home or business as a result of excessive flows in the sewer network (exaggerated by climate change, growth and increased hardstanding areas), a blockage or sewer misuse.

- Sewer Flooding: **Outside the Home** - The anticipated risk flooding from the sewer may occur within the curtilage of a home or business as a result of excessive flows in the sewer network (exaggerated by climate change, growth and increased hardstanding areas), a blockage or sewer misuse.

- Sewer Flooding**: Public Open Spaces** - The anticipated risk flooding from the sewer may occur within the highways or an open space as a result of excessive flows in the sewer network (exaggerated by climate change, growth and increased hardstanding areas), a blockage or sewer misuse.

- Sewer Flooding: **Extreme Storms** - The anticipated risk that flooding will occur inside a property or business as a result of an extreme weather event causing the sewer network and pumping stations to be flooded by rainwater.

Environment – risks that are likely to have a negative impact on the natural environment in the drainage areas. This tab combines the modelled future risk for 3 different ways in which harm may occur.

- Environment: **Pollution** – The anticipated risk that wastewater from our assets may escape as a result of excessive flows in the sewer network (exaggerated by climate change, growth and increased hardstanding areas), equipment or structural failure, a blockage or sewer misuse.

- Environment: **Overflows operating** - The anticipated risk that wastewater may be released from an asset as a result of excessive flows in the sewer network (exaggerated by climate change, growth and increased hardstanding areas), equipment or structural failure, a blockage or sewer misuse.

- Environment: **Capacity** - The anticipated risk that there will be insufficient capacity at a Wastewater Treatment Works to meet our permit requirements as a result of growth.

Asset Condition – risks that are likely to impact the asset integrity. This tab combines two main risks to asset condition:

- Asset Condition: **Sewer Blockage** - The anticipated risk that a blockage may occur in the sewer network as a result of sewer misuse.

- Asset Condition: **Sewer Collapse** - The anticipated risk that a sewer may collapse due to its condition.