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Waste Data Practitioners Workshop
Queen's Hotel, Perth.

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#### **Dr Greg Singh**

Associate Professor in Media & Communications University of Stirling

BE THE DIFFERENCE



### **Background – Open Data**

Open Data: ensures quality and encourages compatibility between different pools of open material.

OD is data that anyone can access, use and share:

"Knowledge is open if anyone is free to access, use, modify, and share it - subject, at most, to measures that preserve provenance and openness".

- Open Knowledge International





### **Background – Scottish OD issues**

Some examples of excellent practice, many of these in the environment sector,

BUT...

Open Data platforms in Scotland are often characterised by an isolated, silo approach to design and implementation.

Through initial scoping research, the project team has identified three major problems resulting from this:

disjointedness; single-level use design, and inconsistency.





### **Project Aims**

- a. Co-create a solution for Open Data Standardisation, to implement the prototype for replication in various sectors.
- b. Undertake comprehensive mapping of existing Open Data in Scotland (what is available/potentially available under "presume-to-publish").
- c. Undertake comprehensive mapping of Local Authority Local Improvement Plans in Scotland living documents on official websites, driven by engagement with constituents.



# Participatory Design and Open Data Platforms for a Data Commons in Scotland: case study - waste management



#### **Project Partners:**

















## **Objective 1:**

Design and prototype an Open Source, multi-level Open Data platform for waste management information and community engagement.



The prototype will be replicable across
Scotland and the UK, using Open Data resources and leveraging Open Data initiatives in local authorities.



# **Objective 2:**

Develop a learning methodology for participatory design, embedding a recommender system in the platform to support user data literacy.



This will incorporate approaches from Human Computer Interaction [HCI], design thinking, data ethics, platform and web development, business analytics, phenomenography and user behaviour analytics.



# **Objective 3:**

Develop a (co-)design methodology for learning platforms. This will incorporate HCl approaches to UX/UI design and user research into individual and community user base needs and use patterns.



**Embedding a co-creation** ethos and co-design approach will encourage movement towards recognition-led recommender systems for more ethical, equitable and inclusive knowledge-building in Open Data networks.





#### Research conducted so far

31 interviews with a range of people from a diversity of backgrounds.

During the interviews tried to get a better understanding of experiences of and attitudes towards waste, resources, recycling and open data.

Interviews, knowledge exchange events and co-design workshops are key to informing our understanding and to shaping the platform design.

They will directly feed into the development of personas, which will be used through the project and by the development teams.

KE events and co-design workshops will take place throughout the project.



#### Research conducted so far

A learnable platform, where the machine and data become the subject of "user" learning, not where users are passive subjects.

Perhaps using tech currently adopted for business/capitalist purposes (e.g. recommender systems), and turning them upside down so they can empower the "user" rather than the business or supplier.

Developing a system shaped by the choice of the "user" rather than being predetermined by us or the system itself.

Utilising well established knowledge about how adults learn (to explore and critique rather than memorise), to provide a 'scaffolding' to support learning and development.





Thank you

**Questions?** 

The aim of Round 1 is to collect as many tokens as you can. You get tokens by finding the answers to the questions in your envelope.

You will use the tokens in Round 2.



Each player will get a character card, three question cards and three tokens (small brown envelopes).

There are three coloured envelopes that contain the answers to the questions.

You play by choosing if you would like to ask a question, paying one token, then selecting the envelope that you think contains the answer.



auestion.



2. Can I put compostable nappies in my garden bin?

How much food waste does Scotland throw away each year?



If you find the answer flip the coin to determine if you win 2 or 3 tokens.

If you win tokens you ned to choose if you want to donate these to the common pot (if so put them in the small brown bowl not containing sweets!) or keep them.

Play moves on in a clockwise direction.



General Public
On your turn you may choose
to pay one token to ask a
question.



2. Can I put compostable nappies in my garden bin?

3. How much food waste does Scotland throw away each year?



The aim of Round 2 is to build a platform.

As individuals choose the features you want to buy and mark these on the sheet.

Please add anything in that would like that is not there, estimating a 'cost'.



The aim of Round 2 is to build a platform.

As a team build a platform together using all tokens, including those in the common pot.

Please add anything in that would like that is not there, estimating a 'cost', there are blank cards for this, we have more if you need them!





### Thank you very much for participating!

Greg.singh@stir.ac.uk
Anna.Wilson@stir.ac.uk
Ashley.McClenaghan@stir.ac.uk
H.l.Hamilton@stir.ac.uk