

# DCS Persona: Sandra, building surveyor and single parent



Sandra was born and grew up in Canada, where she trained and started working as a building surveyor. She moved to Scotland 12 years ago to be with her then partner, but they separated a few years ago. She is happy to be a single parent to her 7-year-old daughter, Niambh, and doesn't want a new relationship. She worked for a large corporation for several years but has recently changed jobs to try and achieve a better work life balance. She is struggling to adjust to working for a small company with limited resources. She loves spending time with her daughter, especially when the weather is good and they can explore the woods near their home. She sometimes worries she should be doing more to reduce waste and recycle, particularly as Niambh seems to be becoming a budding environmentalist, but she has so many things on her plate that she can't always find the headspace to think about it. Sandra loves running (when she gets the chance). It helps her feel free and in control at times when her responsibilities are starting to overwhelm her.

## Environmental stance

Sandra loves spending time outdoors, and cares about the environment. She feels increasingly guilty however, that she might not be doing 'her bit,' particularly since having her daughter. She wants to have more of an environmental awareness but struggles to find the time and energy with work and single parenting. She believes change could be achieved if individual people just acted better, herself included.

## Data use

- Believes that open data can only be a good thing but struggles to find the data she needs in the correct format (e.g. a freely-available spreadsheet showing the carbon costs of materials used in construction).
- Sandra uses AutoCad and other software in her work to create drawings, however, still thinks of data as a numerical entity.
- She uses spreadsheets to provide costings and specifications for her clients, tailoring these according to business needs, which at the moment involves providing a 'carbon' cost' of a project she is overseeing.
- Believes it is important to provide context and to be transparent, allowing others to view your work and spot mistakes is a good thing as it is how you learn and how you avoid mistakes escalating.

## Trust and related issues

When data are too complex Sandra tends to distrust them. She believes trustworthiness and transparency go hand in hand. She's willing to share anything except private data.

## Goals

Sandra wants to achieve a better work/life balance so that she has more time for the important things in life. She wants to help teach her daughter how to be environmentally responsible, but first feels like she needs to educate herself.

Niambh has to complete a project on fly tipping for school. Niambh wants to write a poem about the impact that fly tipping has on animals and Sandra wants to help.

## Frustrations

Sandra likes 'clean' design, she likes white space and doesn't like to have to endlessly click through various pages to find the data she is looking for, only to find it isn't there or is in the wrong format.

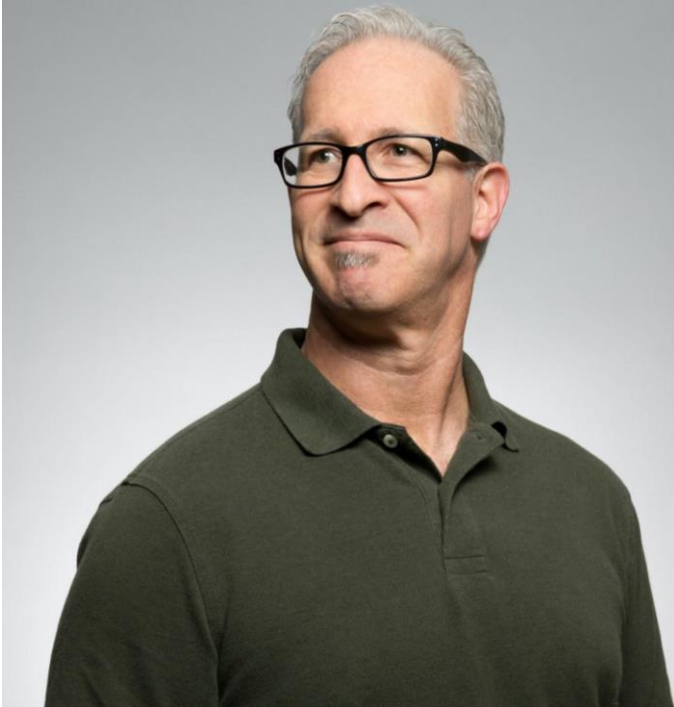
She is frustrated that she doesn't seem to be able to carve out the time she needs to think about what she could change about her daily life to improve the environment. She's also frustrated that Niambh is growing up in a society that places too much emphasis on acquiring the latest fashions and gadgets. She worries Niambh may get sucked into this as she gets older.

## Quotes

*"You just switch off because it's not telling you what you want, just like that. I find it a bit bamboozling just because it's got so many choices. And what is it that I really wanted to know? I've forgot!"*

*"I've heard people talk about different ways of encouraging people to recycle, including fines, but society's not equal and someone might be working several different jobs just to try and feed their children, and to be honest, might not have the headspace to be recycling properly?"*

# DCS Persona: Iain, environmental data worker



Iain is in his 50s and has worked at the Scottish Environmental Protection Agency for just over 20 years. Having trained as a statistician, his first jobs were in the financial sector, where the work was technically challenging and rewarding, but where he missed a sense that he was contributing to the broader social good. At SEPA, he feels he is surrounded by colleagues who share his twin passions for the environment and data.

Iain recently married his long term partner, Gavin. They live in a village near the small city where Iain works. He loves the fact that he and Gavin can go hiking in the surrounding area without having to drive first, but he can still cycle to work.

## Environmental stance

Iain believes that change can often be achieved through incentivising good behaviour and disincentivising bad behaviour, a technique that generally worked well when bringing up his four children, who all still live at home.

Whilst everyone has a part to play, Iain feels that political effort is what is really needed to create wholesale change, particularly if we are to move towards a 'Circular Economy'.

This frustrates him as the pace of change can be slow and often steered by political agendas rather than social and environmental wellbeing,

## Data use

- Has started to use new tools in his works to make data available in new ways to the public but is restricted in what he can do by the software he has access to and a busy workload.
- He understands that data are not static, nor are they straightforward. The data Iain deals with are verified and validated on an annual basis and can change as errors are spotted or new methods of capturing the data are developed.
- As part of his role he analyses data on household waste generated and managed in Scotland. He feels like he could do more to contextualise the data, e.g., to help explain the variation in Local Authority recycling rates but thinks this is probably out with the scope of his current role.

## Trust and related issues

Tends to trust information when there is clear supporting evidence and when the raw data are available. Likes to go back to the data source to see if the methods used and assumptions made are clear and correct.

Feels it is his duty to make sure that data are housed securely and shared appropriately with the right metadata to explain any caveats as well as suitable uses of the data.

## Goals

He has recently brought his housebound mother, who has just turned 80, a tablet so that she can keep up to date with what is going on in the wider world. She has always been a bit of a self-proclaimed 'greeny' and he is trying to find simple and creative ways that she can use technology to keep connected with the world around her and maintain a connection with the things that interest her and that she finds important.

## Frustrations

Iain is frustrated that he can't spend more time helping others to correctly interpret the data that he reports. He knows the tools SEPA have are hard to use and that's a problem. But he finds that the data are often used to tell oversimplified stories that rarely portray the Local Authorities and waste operators in a good light.

## Quotes

*"We're really familiar with the data, with every minutia of what we could possibly do or not do with it, and it's easy to lose sight of what are the questions out there actually."*

*"A member of the public? Absolutely no chance. The filters, everything about it is completely not user-friendly, and yet we've all done all of this work and we've had that obviously paid for."*

*"Information is very important because that informs action, but whoever mediates that information has got quite a lot of control, so that is the issue."*

# DCS Persona: Laetitia, primary school teacher



Laetitia, 28, was born and raised in Glasgow and completed her teaching degree in Ayr 5 years ago. Her first job while an NQT was at a primary school in an island community, and it was while working there that she met her boyfriend, Steve. She loved working at the small, friendly school, but she knew it wasn't like most schools and so when the opportunity arose to work in a school back in Glasgow, she took it. She appreciates Glasgow's parks and green spaces and wants to bring some of the joy in nature so easily accessed in the islands to her current city-centre charges.

Although she and Steve were only together for a year when she left the islands, Laetitia feels their relationship is strong, and is glad that she lives in the 21<sup>st</sup> century and they can talk every day and exchange messages even more frequently. She's also glad to be back near her brother, who is struggling to build a career as an artist. He sometimes suffers from anxiety and whom she wants to support.

## Environmental stance

Laetitia believes that, as a society, we need to develop a new and better relationship with our environment. She tries to act on her principles – her friends are surprised that she and Steve don't visit each other more often, but the pair both feel the carbon cost of flying is too expensive even if the financial cost is low. She thinks that change can be achieved through better access to information, both at the individual and community level. She understands that people access information and learn from it in many different ways and likes to think creatively about activities that she can develop to help the children at her school understand more about the world around them. She is community minded and tries to help those around her

access information to make decisions and be more empowered.

## Data Use

- Laetitia is primarily interested in how data can be accessed and shared in a meaningful way, rather than in the data itself. She tends to trust data from the government, local authorities and authoritative sources and rarely explore other data sources.
- She wants data to be available in a range of formats, from tables, graphs and maps to pictures and poems, as she knows some people won't interact with numbers as they find them too 'bamboozling'.

## Trust and related issues

Laetitia generally trusts data and information provided by authorities as she deals with her local authority education department in her role as teacher.

She is cautious about sharing data and accessing information online as she is responsible for safeguarding the wellbeing of the children in her care.

## Goals

Laetitia is aware that some of her goals, such as living with Steve, may be a way off. That's OK though, as she has other goals that she works on all the time. She wants to help her students develop what she thinks of as environmental literacy as well as teaching them to read, write and add up. She also wants to support her brother, who has started focusing on producing art pieces using other people's waste, and who has an exhibition coming up at the local community centre. She wants to help him find materials that are being discarded and publicise his exhibition when it is ready, but she is also concerned about how daunting he's finding the prospect of this first ever solo show.

## Frustrations

Laetitia gets frustrated by a lack of creativity in making data interesting and accessible for young people. She wishes there were more ways for her students to interact with the data in a simple way to create their own graphs and maps etc. but often finds that the interfaces do not support this. She is also frustrated that the supermarkets and shops aren't doing more to reduce packaging – after all, the information on the need to do this is easy to understand.

## Quotes

*"What I like is my mobile phone. You talk to it. You can say, "Hey Google." It will search anything I want, or it might start playing a record or it might email or text somebody for me."*

*"It's making it available in a way that empowers people, because it's too easy to provide too much information and people look at it and go, "Well, that's maths from school and I don't want to ever go back to that place." You want to make sure that it's not condescending, it's informative, it's interesting but people can engage with it."*



# DCS Persona: Steve, islander and local authority worker



Steve, 36, lives in the largest city in an islands community. Because his girlfriend doesn't live in the islands, he spends a lot of his free time on his own, often out with his two dogs. He has worked for the local Council since leaving school and taking up an apprenticeship 19 years ago. During this time, he has had lots of waste-related roles – from manning the weighbridge, to taking groundwater samples at the landfill, to dealing with submissions to SEPA and Freedom of Information (FoI) requests.

## Environmental stance

Steve's time working with waste has left him aware of environmental challenges, but also how difficult they are to solve. He's not an activist but tries to minimise both his carbon footprint and his waste. He's convinced that recycling is not the best solution, especially for a community like his, where the carbon cost of collecting waste and transporting long distances to processing facilities may outweigh the potential gains. He's also very aware of the fragility of the islands' economy and feels that practical solutions are needed that balance environmental protection and a functioning economy.

## Data use

- Comfortable with numerical and statistical data and used to handling data to submit to SEPA and producing graphs for Council reports. Has undertaken CPD to gain expertise in these areas. Believes that more open data and more open communication in general

between local authorities could help improve work processes and sharing of best practice and what does not work, and what is and is not of overall benefit to the islands' environment and economy.

- Responsible for handling Freedom of Information (FOI) requests relating to waste, which he finds tedious and repetitive. Believes that FOI are not an effective way of sharing data and that change can only be achieved if other ways of reaching individuals and communities can be found.
- Frustrated by the public perception that local authorities 'are not doing enough' and a general failure to grasp that the Local Authority recycling rates published annually don't take account of the additional challenges some local authorities face. His islands community is managed by a single local authority, which faces vastly different challenges to mainland local authorities.

## Trust and related issues

Steve fears intentional data manipulation by the press, in particular misrepresentation of local authority statistics to sell newspapers. He's also concerned that environmental campaigners often present data in ways that serve their own argument, rather than genuinely inform the public. The appropriate context is never given therefore people don't understand they are comparing apples and pears.

As Steve deals with other people's data, he has privacy/security concerns and believes that some data just shouldn't be shared.

## Goals

Steve wants his relationship to stop being long distance. He has been looking for jobs on the mainland but feels he has spent a long time building up expertise and so would only move if the right job came up. He is also very proud to be an islander and wants to continue to help the community to thrive and develop as new technologies and environmental issues offer new opportunities.

## Frustrations

Steve wishes that people would take more responsibility for their own actions, particularly when it comes to their waste. People should know by now what goes in each bin! He also wishes that people would read beyond the headlines and stop blaming councils for everything, they do the best they can with ever dwindling resources and get no thanks.

## Quotes

*"There is an island mentality towards reuse practices but how do you formalise it and turn it into a business model?"*

*"I'm all for open data by default and I think we should be more transparent. But how do you account for the value that's done within the public sector? If the private sector are just regurgitating the data that you've put out for free and then they charge for it, what's the cost to get that open data available? Who pays for that cost?"*

# DCS Persona: Nils, allotment enthusiast and reuse novice



Nils lives in the central Scottish town he grew up in. He didn't really enjoy school and left without many qualifications. Since then, he has had a series of low-paid jobs, often with anti-social hours. He's currently a kitchen porter. This means he works a lot of evenings and weekends. Nils quite likes this as it means he can spend his days in his allotment. He loves the satisfaction of growing his own fruit and vegetables and being outside. The only thing he loves more is his wife Sarah. They're keen to start a family so plan to move out of their small, gardenless flat. In an attempt to save for a deposit, they have set themselves the challenge of not buying anything new for a year.

## Environmental stance

Nils likes to enjoy nature, not worry about it. He deals with things that have an immediate impact on him and his wife rather than trying to tackle wider social and environmental challenges. He doesn't feel he can affect these anyway. Some of his and Sarah's friends have been to Extinction Rebellion meetings in his town, but Nils doesn't want to do things to disrupt ordinary people – they're not to blame for the failures of international governments. He is, however, very keen on recycling and always makes sure he and Sarah put the right things in the right bins.

## Data use

- Nils guesses that open data is a good thing as he supposes it will help people find what they are looking for more easily.
- Data need to be simply presented and very accessible/easy to find for Nils to engage, he generally finds data too complex and turns off.
- He will look for simple information online like changes to bin collections and if the council are still providing free compost but gives up quickly if he doesn't find what he needs.

## Trust and related issues

Nils doesn't find it easy to navigate all of the various data sources available and hates numbers. He doesn't believe that the government or local authorities intend to do the right thing and thinks that they often make things overly complicated to hide what they are doing.

He likes a simple life and doesn't really want to spend time looking at data anyway, unless he gets a bee in his bonnet about something.

## Goals

Nils and his wife are saving to buy a bigger property with some outside space – somewhere suitable to raise kids. He wants to try and cut back on his spending and acquire the things he needs for free or second hand where possible.

Deep down Nils would like to be more confident at finding the information he wants online and gets cross with himself when he fails. He'd also like to return to education one day.

## Frustrations

Nils lives in a small flat with his wife, with no outside space. He gets frustrated by the amount of space his recycling takes up, though is determined to separate things properly.

He feels annoyed when he sees other people throwing all their waste in the same bin and not putting out their food caddies. If he manages to do it then it can't be that hard! He is especially irritated when he sees unwashed glass and plastic in the bin for rubbish destined for landfill. He is, however, very frustrated by the way the rubbish and recycling collection seems to keep changing.

## Quotes

*"I keep thinking about it and I've never done it – I might write to my local council to ask some more questions."*

*"I'm not really one for protests. I'm more I make my own choices."*

*"I actually don't like numbers, and I get quite frustrated with numbers...I'm really into meaningful things...I'm sceptical of numbers."*

*"There's too many adverts, too many pop-ups that come up. You click on it and you just want to get to one thing. You try to focus but all around you've got adverts going on, flashing screens, flashing lights. It distracts you. I don't like that."*

# DCS Persona: Laura, environmental activist



Laura is a self-proclaimed hippy environmentalist; she is out there to save the planet. She attends protests, writes blogs and, as far as she can, lives a zero-waste lifestyle. Laura has a degree in Environmental Science. She is good with numbers and uses data to draw attention to businesses and organisations that don't have good environmental and ethical practices. Laura also tries to share good news stories, both big and small, and highlights when an organisation is doing well in relation to the environment. In her blog, Laura tries to help the public connect more with data so that they can find their own meaning in it, hoping that it will empower them to make informed decisions and lead to long term behavioural change.

## Environmental stance

Whilst Laura would like to see big changes to the way we treat the environment, she believes that meaningful progress can be made even within the current capitalist system. She thinks that with the right communication and (though she hates to admit it) 'marketing for the environment,' the general population can be steered towards making many small, meaningful changes that together can add up to a big difference.

At the same time, Laura believes that big corporations and the government need to do more and should be held to account when their practices lead to environmental or social harm.

## Data Use

- Laura has real concerns that more open data will lead to more misuse of data by big corporations and the media who have the power and resources to manipulate numbers that are often so inaccessible to the public.

- Laura believes we really need to work on accessibility and presentation of data in general to allow wider access and empower people to hold others to account/ make more informed decisions.
- She knows that data need to be more than just numbers: to save the environment we need to be able to 'tug at the heart strings' and persuade people to act. We therefore need more images, infographics and qualitative data.
- Laura believes that contextualising data is important so that people can understand what they need to do to help make a difference, e.g. change what they are doing at home or understand that the issue is bigger and they need to lobby their local MP.

## Perceptions of Trust

Laura prefers to think that data from local authorities and government agencies like SEPA are more trustworthy than from other sources. She understands that there is no such thing as a perfect dataset, but generally believes that the data they publish are of a good quality and show little to no bias.

Laura is concerned that data can be used to tell stories and that they are often misused by big corporations and even the government to manipulate the public.

## Goals

Laura has decided that in order to hold people to account and provide more compelling information in her blogs she needs to get to grips with Scottish waste data. Only then will she be in a good position to see the truth behind the statistics and headlines. She is confident with numbers and also feel like she can be quite creative in her approach to conveying information, she just needs to get her hands on all the data in a format she can use!

## Frustrations

Laura gets frustrated by big corporations that misuse data and is beginning to get more disillusioned by government manipulation of data, spinning headline statistics to appear as though they are efficiently reducing Scotland's environmental footprint, when actually the environment is low down the political agenda.

## Quotes

*"I'm going to be less believing, or I'm probably not going to alter my life as much based on a newspaper story or any kind of unofficial site or Facebook or this kind of nonsense."*

*"If I get graphs and charts where people have interpreted the data, then I immediately look at it from a sceptical scientific point of view. The only way to check is to have a look at the original data – you know, have they spun this to tell a particular story?"*

*"We have to tug on the heart strings, tell the story behind the data ... Then I would manipulate it and use the data that went with my argument."*