Department
for Environment
Food & Rural Affairs

Being planet-centric:

Principles for designing lower-environmentally impacting services

Services Week

2023

An outline of the session today (45 mins):

1. The journey of our Planet-centred design Working Group (a group of designers at Defra) so far **(7 mins)**

2. Presenting our first draft of 9 planet-centred principles and 24 guidelines **(10 mins)**

3. Discussing where things can go from here **(5 mins)**

4. Opening the discussion to the floor – we'd love to hear your thoughts and experiences! **(20 mins)**

Why should we be planet-centric?

We only have 1 planet - not 1.75

Earth Overshoot day this year: 27 July

Earth Overshoot Day 2022 home - #MoveTheDate

Our story began with a problem:

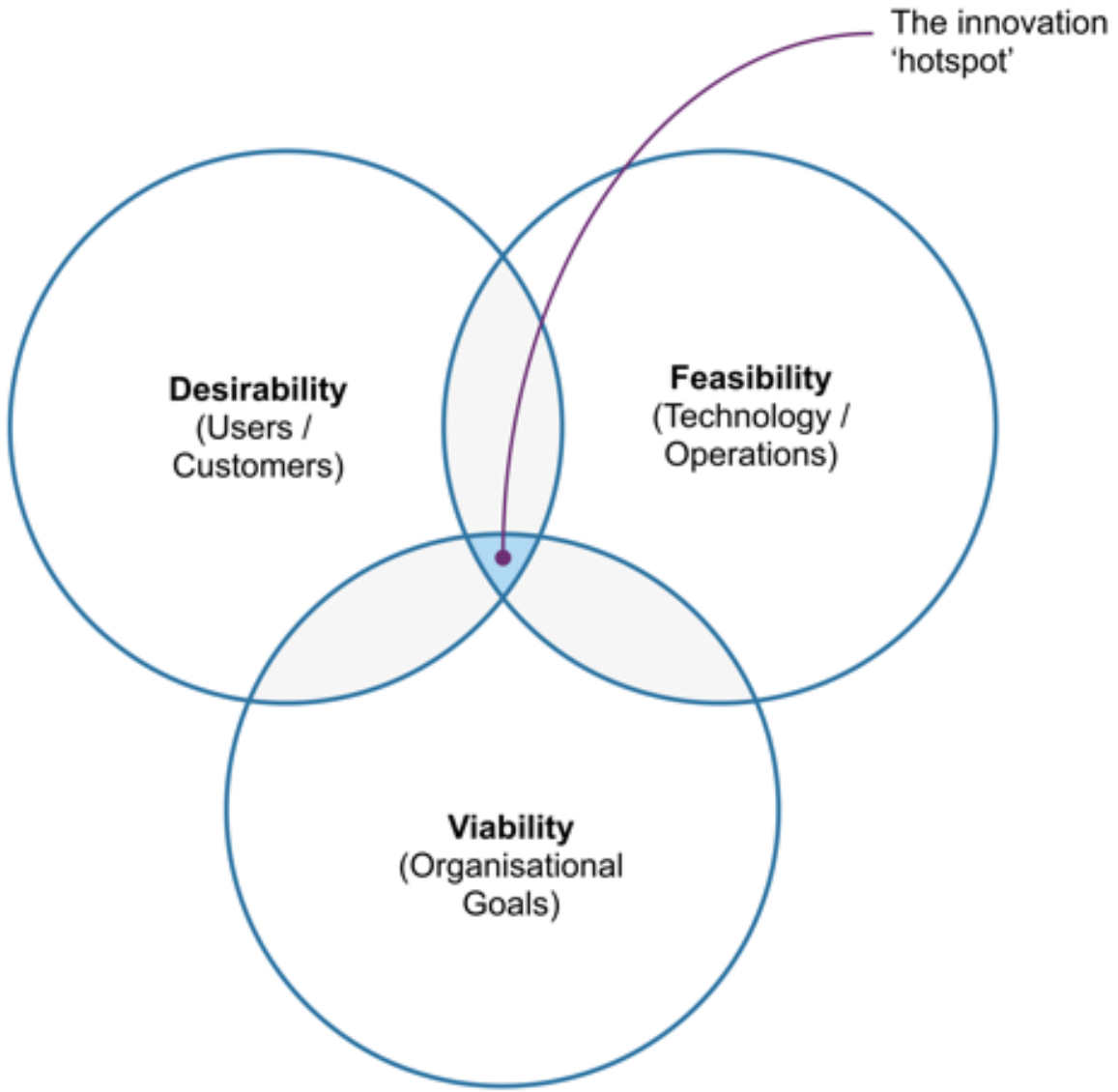
1. We were concerned at the **environmental crises** faced by our planet

2. We were encountering calls for design aid to the transition to **circular economies**, to **net-zero** and to even being **regenerative**

3. Our **problem** was that we didn't understand where **our work**, as designers and researchers in the (mostly) digital sphere, **practically fitted** in.

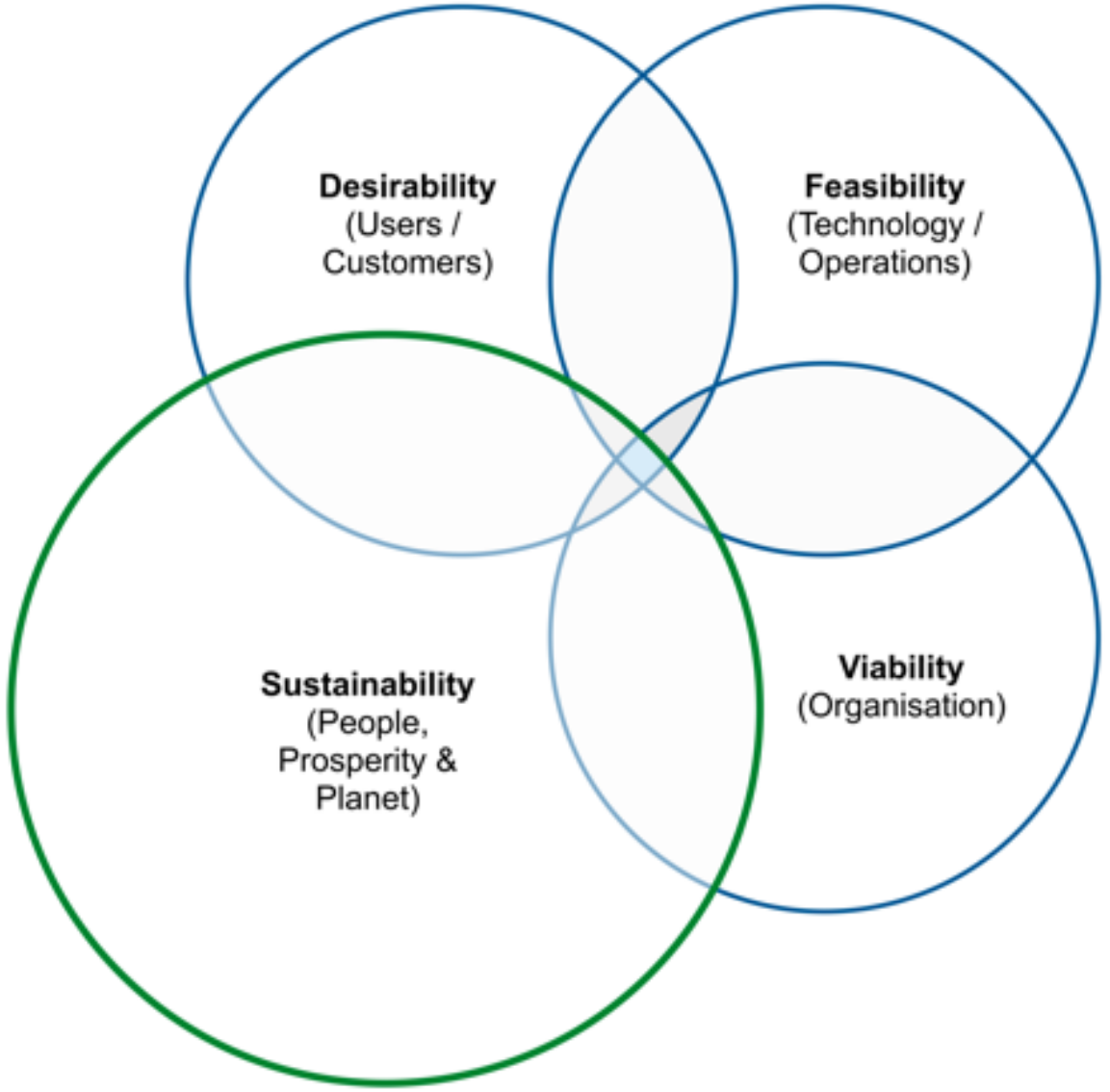
A need to shift from the ‘design thinking’ paradigm?

The dominant paradigm in design is **user-centricity**, meaning focusing on user needs, and balancing those against **organisational goals** and **technical feasibility,** to reach the ‘sweet spot’ of successful innovation.



A re-scoping to include sustainability

What it seemed to us was needed, in effect, was to radically **broaden the scope** to also include consideration of the **sustainability** of the product or service as a fourth lens.



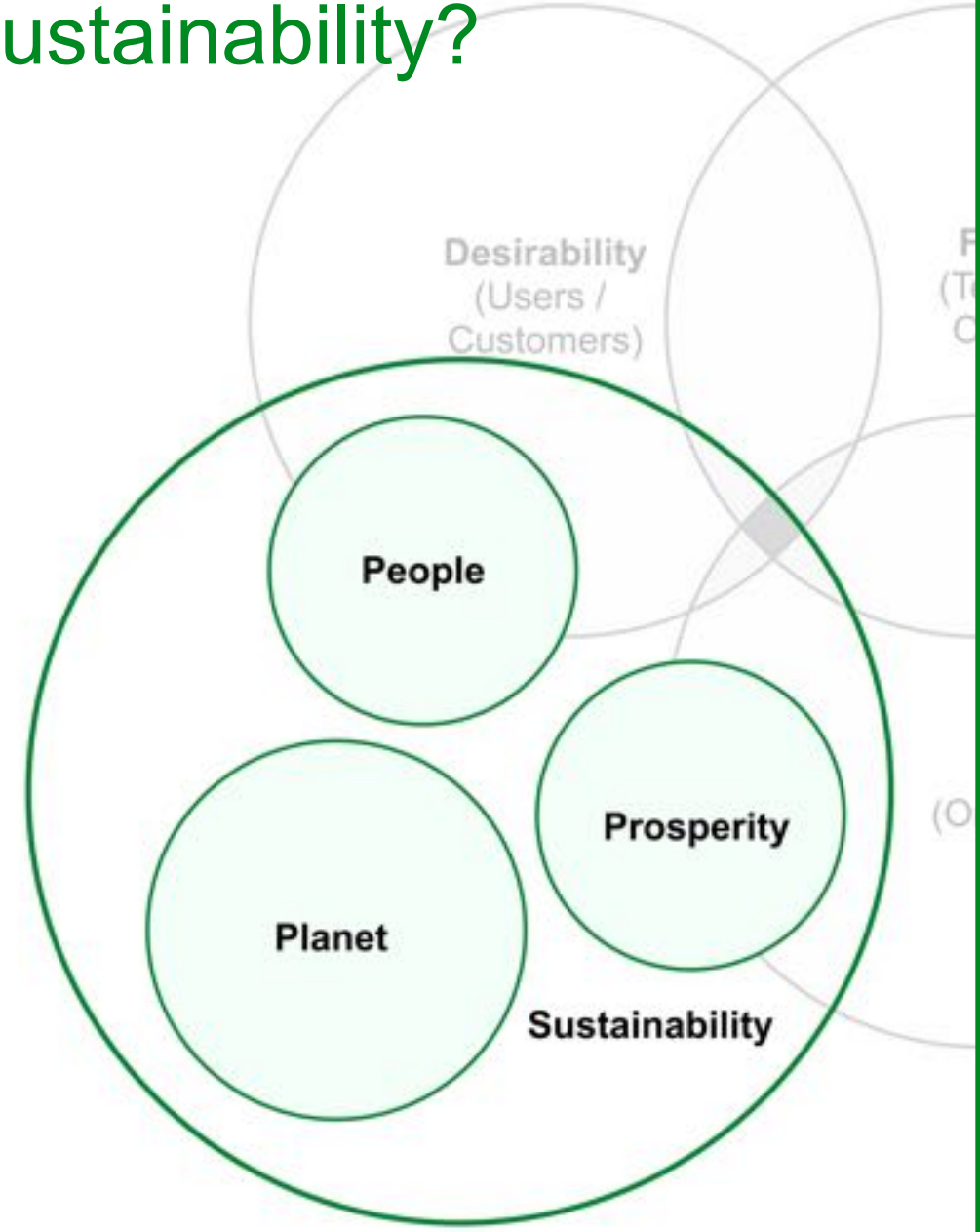
A triple bottom-line breakdown of sustainability?

The ‘triple bottom-line’ approach breaks sustainability down:

PEOPLE – social well being, considering all stakeholders (versus solely shareholders).

PROSPERITY – a just economy, in harmony with nature “ensure all human beings can enjoy prosperous and fulfilling lives”.

PLANET - environmental sustainability, accounting for the holistic impacts on the ecosystems that sustain life.



Forming the Planet-centred design Working Group:

So, we came together and formed the Planet-centred Design Working Group to start educating ourselves on the topic and creating opportunities for other designers to join the conversation.

Over the last 6 months, we have drafted a set of 9 core principles and 24 guidelines for being planet-centric in the design of services.

Many of the principles represent win-win-win-wins in terms of general usability, accessibility, inclusivity and sustainability. Many we should be doing from the POV of the Service Standard anyway, but worth restating for clarity.

The 9 Planet-centred principles:

1. Understand what the current impacts are
2. Be smart with data
3. Learn from each other's services (good and bad)
4. Design to help users have a low impact on the environment
5. Show users how actions can impact the environment (good and bad)
6. Design for easy service journeys
7. Care for content, through its whole lifecycle
8. Design simple flows and navigation on digital interfaces
9. Design for lightweight screens

1. Understand what the current impacts are

1a	Understand user behaviours and journeys in terms of energy and material use, travel etc in the as-is, including both on and off service.	UR, SD
1b	If there is an existing digitized service, uncover and map where content, web pages and data exist, and ensure deletion if redundant within the new service.	UR

2. Be smart with data

2a	Share and re-use research as far as possible to avoid duplication on different projects/teams and data becoming ‘dark’.	UR
2b	Only ask users to input information that there is a clear need for, and that has not been captured elsewhere.	UR, CD, SD

3. Learn from each other’s services (good and bad)

3a	Identify service precedents for good from a user behaviour or service design point of view	SD, UR
3b	Start designs with established GOV.UK patterns that have been validated with users.	IxD

KEY

- SD — Service Design
- CD — Content Design
- UR — User Research
- IxD — Interaction Design

4. Design to help people have a low impact on the environment

4a	Design services so that users' physical movement, whether commutes, other travel or transport of materials is kept to a minimum.	SD
4b	Design services so that users' consumption of energy and heating is kept to a minimum	SD
4c	Avoid use of software or technological requirements that will require/encourage users to purchase new/more digital devices where possible	SD IxD

5. Show users how actions can impact the environment (good and bad)

5a	Help users become carbon-aware by displaying carbon usage to the user on pages/apps where appropriate.	IxD CD
5b	Help users understand how to take positive action to reduce or minimise their carbon impact where appropriate	

6. Design for easy service journeys

6a	Design journeys so users can complete their goals in quick and friction-free a way as possible	SD
6b	Design services so people need as few as possible interactions across different channels in order to complete their goals.	SD IxD
6c	Design for inclusivity so everyone can complete their goals with the service	SD

7. Care for content, through its whole lifecycle

7a	Design content that is easy to understand, clearly structured and organised so that it is findable and helps users achieve their goals.	CD
7b	Optimise sites for search engine ranking so users can find their way to right page quickly	CD
7c	Design for lightweight and efficient communication with users across all channels	CD
7d	Pay attention to the end of service content lifecycle – withdraw and archive when appropriate.	CD

8. Design simple flows and navigation on digital interfaces

8a	Design flows with as few separate pages as possible	IxD
8b	Design navigation and menus so users can quickly find their way to the page/content they need	IxD CD

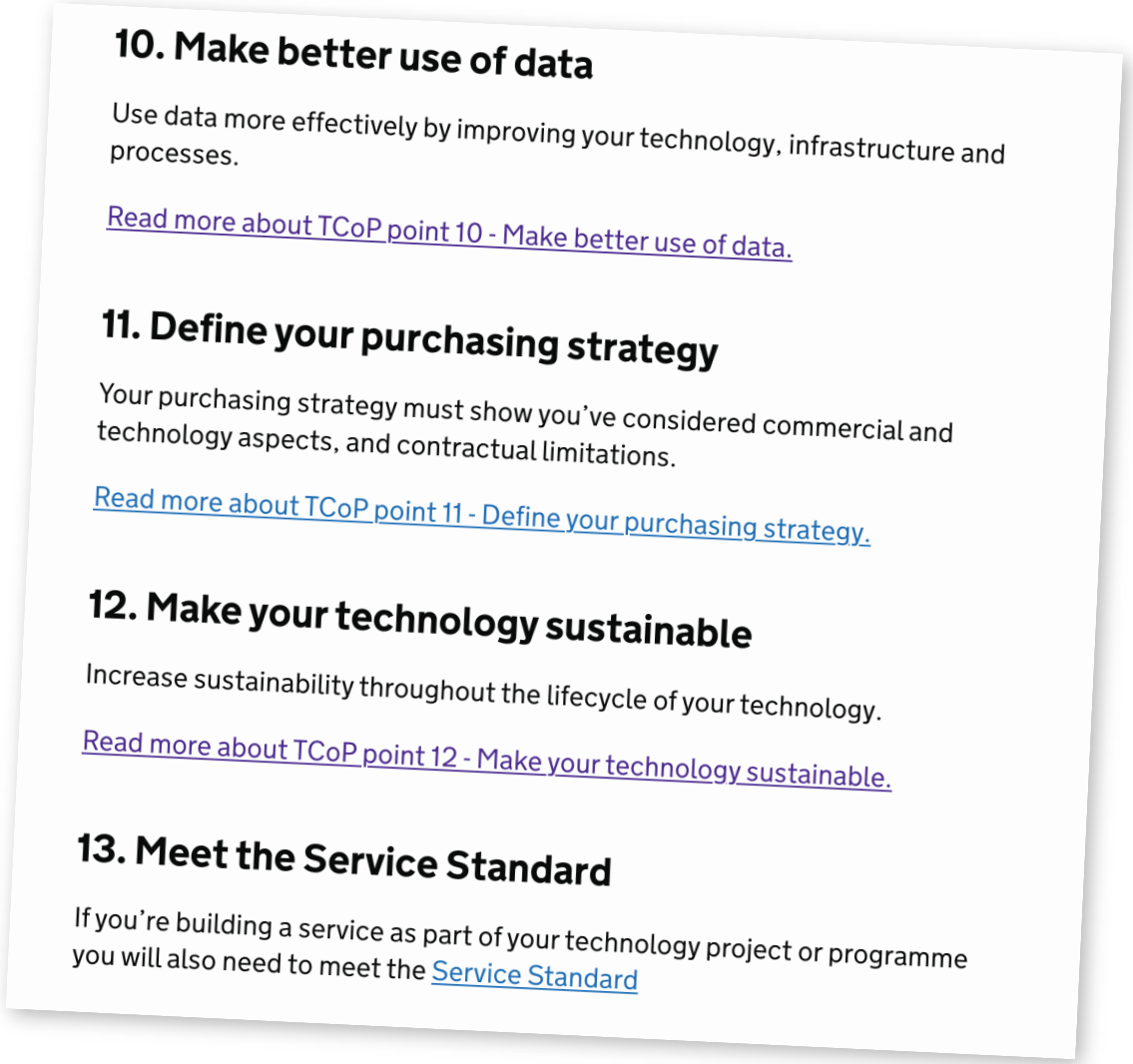
9. Design for lightweight screens

9a	Only use photos and videos where they clearly add real value for users, and when used compress as much as possible.	IxD
9b	Use system fonts, with as few different font weights, as possible. If using non-system fonts, ensure they're saved in modern font file formats.	IxD
9c	Select colours and contrast that balance accessibility needs and energy consumption.	IxD
9d	Implement CSS to minimize page weight and processor usage.	IxD

There is already detailed guidance on sustainable ICT…

Its important to mention that there is already detailed **guidance** on architecture, development, datasets, team practices and other areas from a sustainability point of view, available in the **Technology Code of Practice**, the **Digital Data & Technology Playbook** and other places.

https://www.gov.uk/guidance/the-technology-code-of-practice
https://www.gov.uk/government/publications/the-digital-data-and-technology-playbook



10. Make better use of data

Use data more effectively by improving your technology, infrastructure and processes.

Read more about TCoP point 10 - Make better use of data.

11. Define your purchasing strategy

Your purchasing strategy must show you've considered commercial and technology aspects, and contractual limitations.

Read more about TCoP point 11 - Define your purchasing strategy.

12. Make your technology sustainable

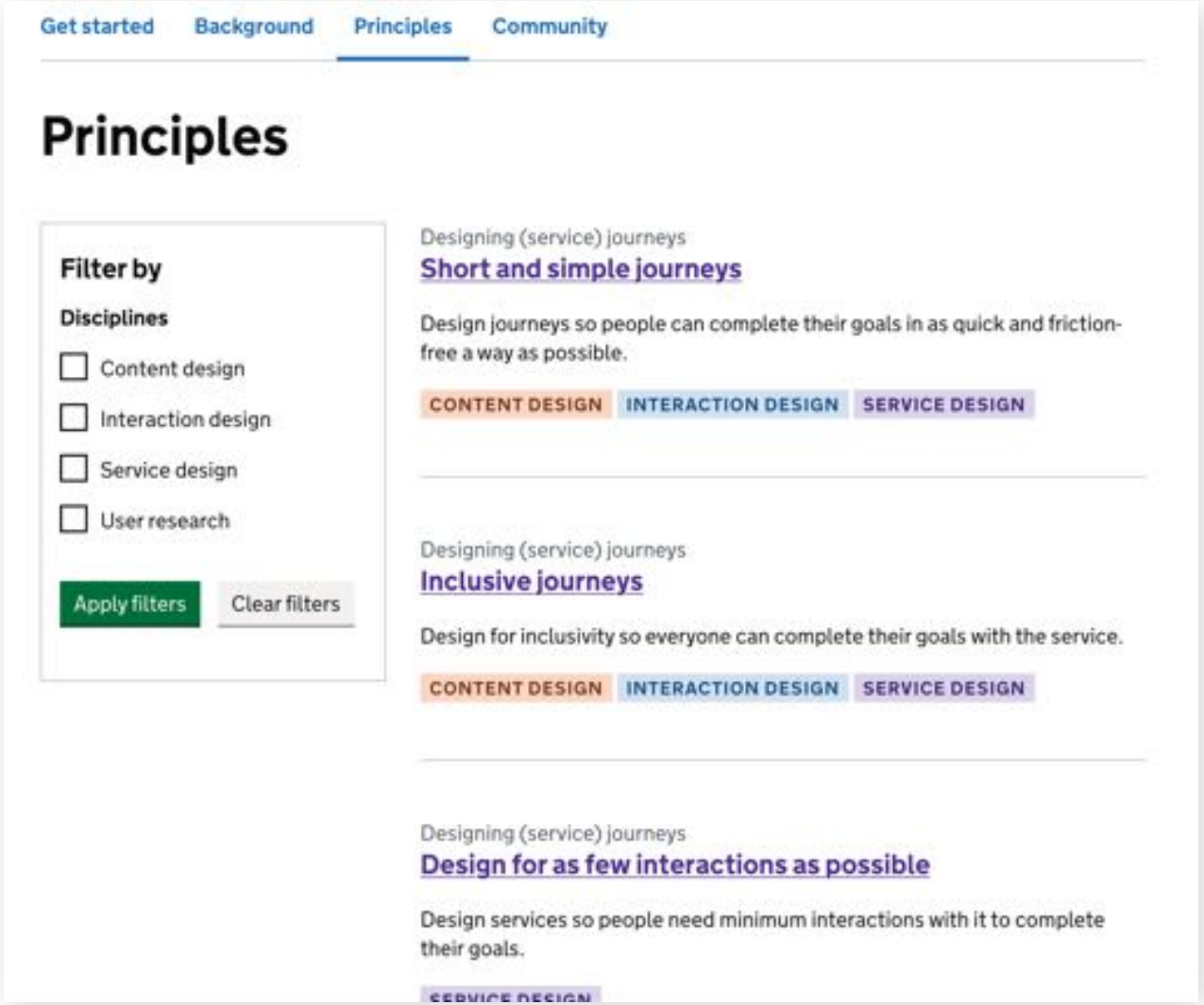
Increase sustainability throughout the lifecycle of your technology.

Read more about TCoP point 12 - Make your technology sustainable.

13. Meet the Service Standard

If you're building a service as part of your technology project or programme you will also need to meet the Service Standard

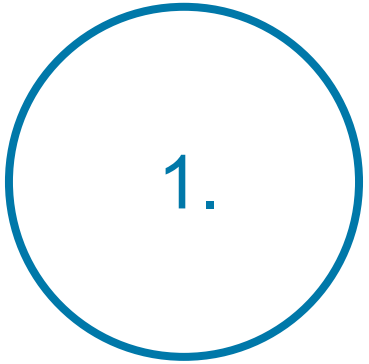
Our vision is of a single page to visit for guidance



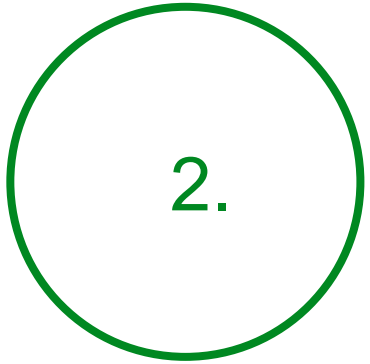
Our vision is ultimately for there to be a **one-stop shop**, a page where anyone on a **multi-disciplinary** digital project can go to see principles and detailed guidance relevant to their role as well as how to **collaborate across disciplines** towards the goal of low-environmentally impacting services!

What else will we be working on?

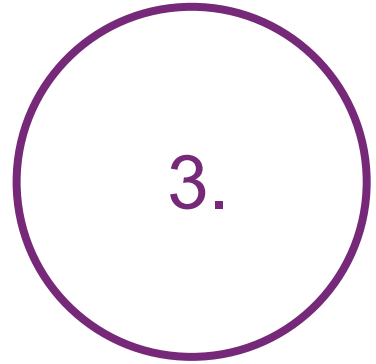
We have created a first draft of these principles but there's much more to come!



Our Defra working group is evolving to become a **cross-public sector** group (under STAR) to develop this work



We'd like to find **try the principles out** on some projects and develop **case studies** of them in action



We'd like to do more work on guidance for how to **map** a specific **service 'ecosystem',** identify the likely impact **'hotspots'** and **ultimately measure** these

For now, we'd love some feedback on the principles so far!

1. What are your first impressions of the principles?
2. What would you see as the challenges in implementing the principles?
3. Could you see the principles working in services that you are involved with?

Want to get involved in driving this work or give us more feedback? Please get in touch!

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