

Website: eds.ukri.org

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Exploring co-creation and user centred approaches for data services and how to share good practices across our organisation and beyond.

What are user centred approaches?

- An iterative approach that prioritises end-user needs, preferences, and experiences throughout design and development
- While known by various names (like user experience, user research, user interface design, user acceptance testing, co-creation, co-design), we use the broader term ‘user centred approach’ to broadly cover all work in this area, focussing always on the user’s perspective.
- The Nielsen Norman Group, a globally trusted team of user experience experts, state there are six levels of maturity for embedding user centred approaches within organisations (Figure 1).

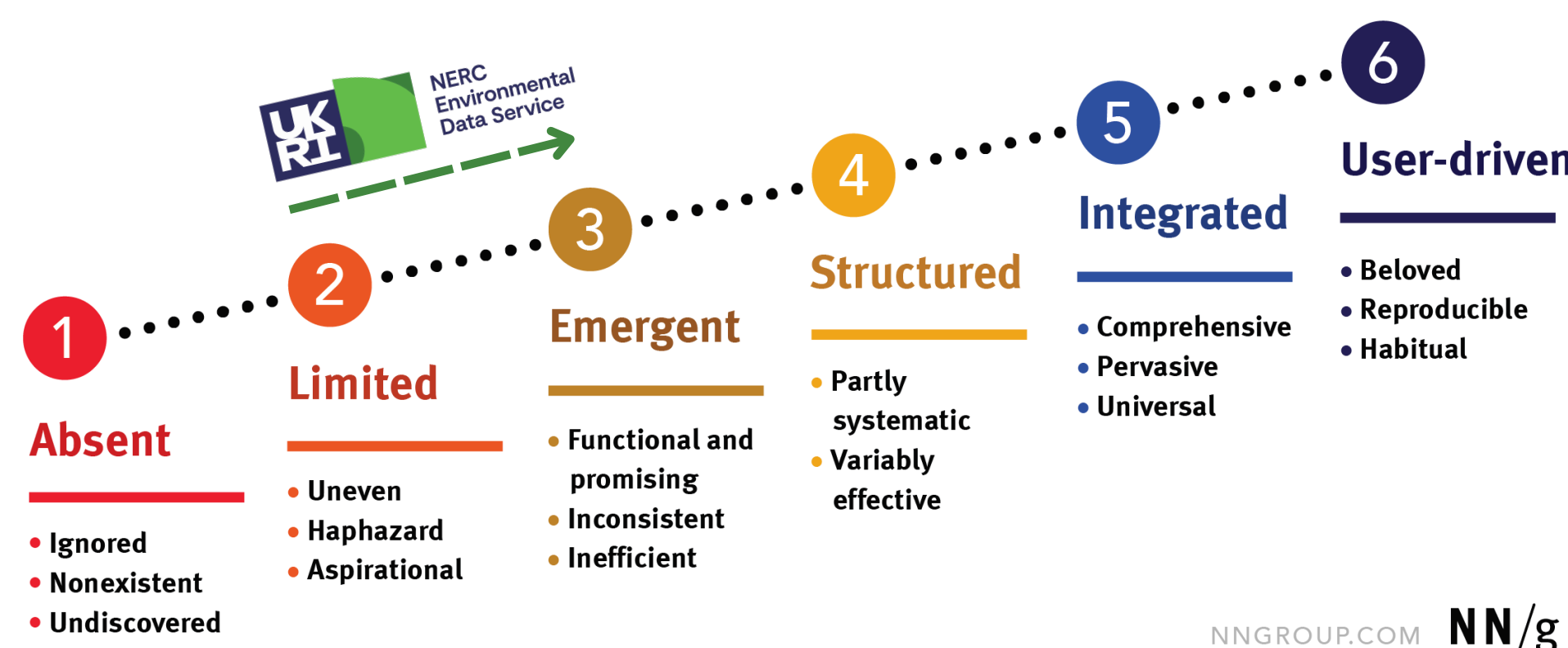


Figure 1: The six levels of user experience maturity, as defined by the Nielsen Norman Group: www.nngroup.com/articles/ux-maturity-model

Why is this important?

Ensuring data services are fit for purpose is becoming more important as a broader range of people find and access environmental data.

User centred approaches help achieve this by tailoring services to diverse needs and enhancing communication of complex science.

Challenges

- Ineffective sharing of learnings across environmental domains
- Changing ways of working and mindsets
- Flexibility and openness required to adjust outcomes
- Lack of resources and time restraints
- Working with diversity and across silos
- Understanding and engaging the user

Mitigations

- Consistent user centred research and design methods
- Culture of knowledge sharing
- Measurable outcomes
- Strong leadership

This work tackled this head on, by identifying existing knowledge and challenges, gathering and sharing good practice, and building a network of experts.

What have we done?

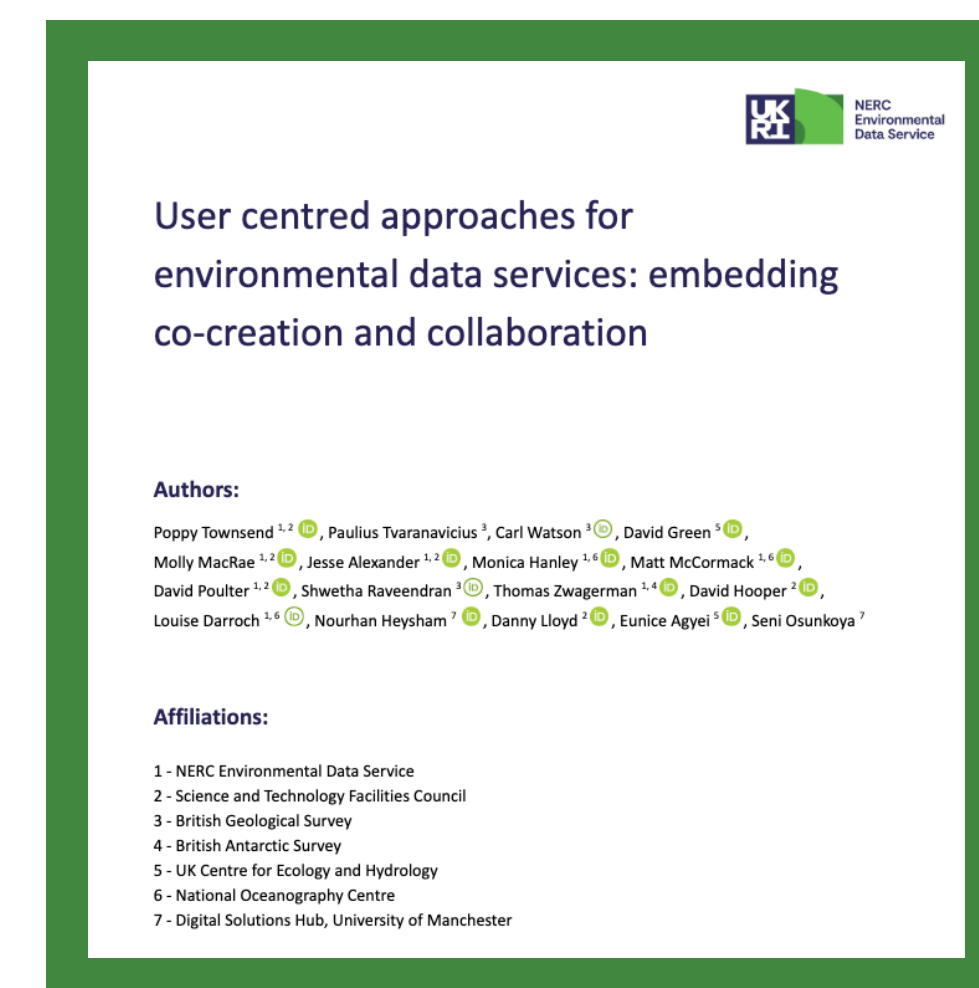
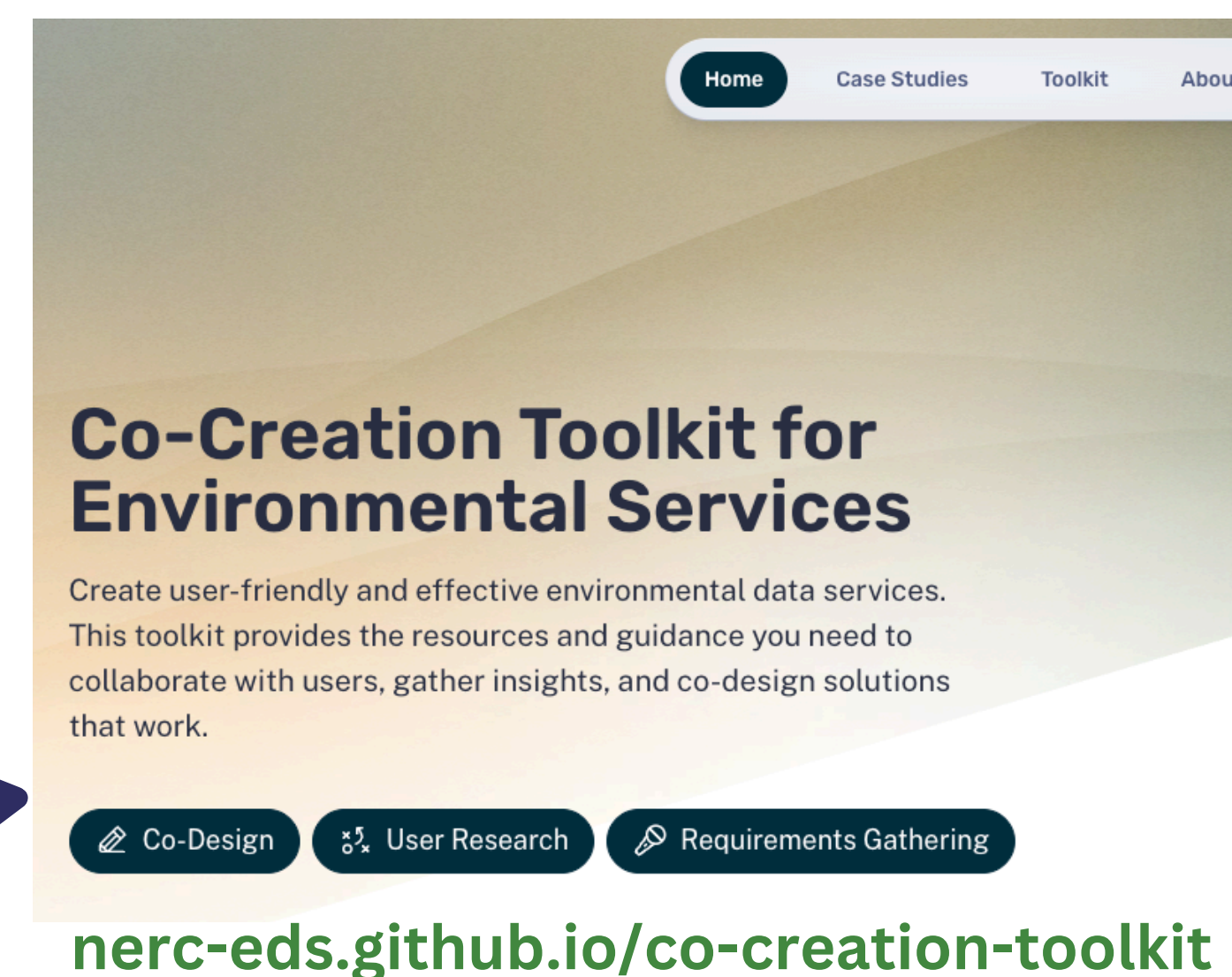
A group of individuals across environmental domains, with expertise in data services, have joined forces to gather evidence, share knowledge and suggest improvements for implementing user centred approaches.

We have created a toolkit with the aim of supporting data, software and design experts to create user-friendly and effective environmental data services. The toolkit provides a range of resources, case studies and guidance needed to collaborate with users, gather insights, and co-design solutions that work.

This work, summarised in a report, has been shaped by collaborations across all environmental science domains, with a range of experts in design, data management, communications and engagement, and software engineering.

Toolkit

- Example case studies
- Guidance and templates



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Project report

Case studies
Webinar
Expert meetings
Desk studies
Workshops
Interviews

What next?

Our journey towards becoming a truly user centred organisation is only just beginning. Our current **guiding principles to embedding user centred approaches across our organisation** are:

- 1 Listen and adapt:** we must understand diverse perspectives and redefine solutions to suit their needs
- 2 One size does not fit all:** use multiple customised methods (surveys, interviews, workshops) to get the information we need
- 3 Prioritise and facilitate:** we must carefully design and facilitate user centred approaches to ensure inclusivity and participation
- 4 Collaborate, share and disseminate:** it is an iterative process, we should share the highs and lows so others can benefit

We’ve identified **three key themes for future work:**

- 1 People and communities:** we must foster a collaborative environment and build a network for sharing challenges and successes.
- 2 Processes, governance, and strategy:** we must operationalise findings, embed user centred approaches in strategy, and explore creative methods for undertaking new work in difficult financial landscapes
- 3 Information management:** ensure unrestricted access to project documents and resources to promote transparent collaborations and reduce duplication

Tell us what you think!

- Try out our toolkit - what could be improved? Do you have any examples to contribute?
- Do you face similar challenges? Would it be useful to collaborate or form a community of practice?

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Contributions

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- 6 - National Oceanography Centre
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The authors are the core project team but there are many others who have contributed to this work.

Who should care about this?

Anyone who wants to create or use user-friendly and effective environmental data services. You might be have a background in:

- data, software, design
- environmental science
- social science
- communications and engagement