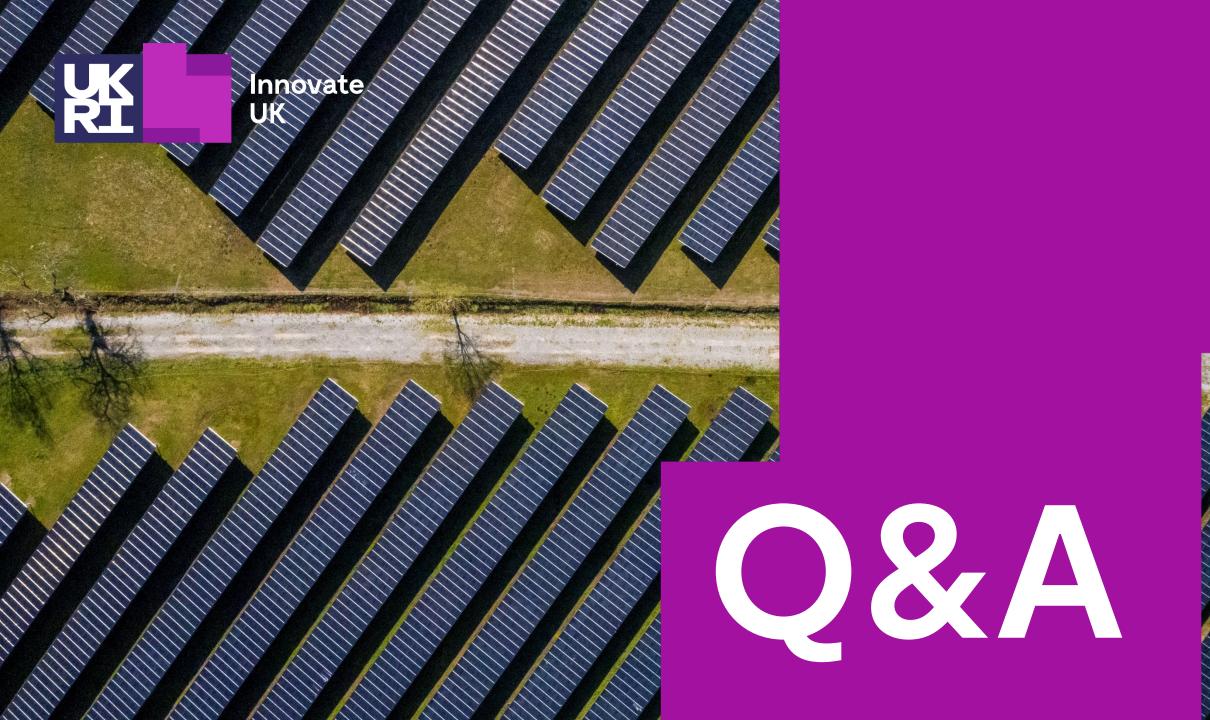# Inclusivity in Design: Embracing Accessibility Challenges – Round Up

UKRI Innovate UK

Summary of Event

As a group we discussed the importance of avoiding assumptions and conducting user analysis to find the right solutions, which may not always involve technology. There is cautions against using technology just because it's trendy, highlighting the need to prioritize the users' actual needs over assumptions and biases. Additionally, we discussed the significance of inclusivity in design, reminding designers to consider who they are creating for, who else has access, and how to make products more accessible without being lazy about it. Effective communication and messaging is also emphasized as crucial for clarity throughout the whole of the design process.
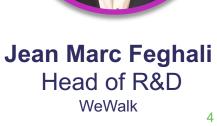
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Q&A

Q: Interesting point about users 'not wanting to be bombarded by tech' and the idea of keeping it simple. How do you down-select what functionality and interface type to focus on

A: I suggest understanding what your users truly need and keeping it straightforward. Identify the main issue your tech aims to solve and who it's for. Is this really a problem? That usually gets you very close to this 'simple' product/solution.

Once you've selected your user group and learned about its intricacies (for instance, blind vs partially sighted, guide dog vs long cane users), you then have to further explore the user's life: what frustrates them, what they like, and their tech skill level. Stick to features that genuinely make their lives easier and enhance their experience with your product.

At WeWALK, we always start with user research. Interviews, focus groups, or even simple surveys can shed light on what works and what doesn't. For instance, we found that the long cane was great at ground level obstacles, but could not detect upper-body obstacles. Users therefore didn't need a cane replacement, they just needed something to augment the cane. We may have easily overcomplicated the problem by trying to replace the cane itself.

Jean Marc Feghali
Head of R&D
WeWalk

Q: I'm intrigued how WeWalk avoids the "unknown unknowns" problems, i.e. users are not necessarily aware of all possible options or even bothered much beyond the immediate problem they have and want solved when assembling your initial requirements packages?

A: This is certainly one of our biggest challenges. To try to overcome this, we interview users from a bottom-up approach. As well as simply asking "what problems do you face", we also ask about their day-to-day activities, and that often teases out issues. For instance, we asked an older user about how they use a bus, and they mentioned that, at the stop, they often want to sit, but not all shelters have seats. We then realised that their walking frame could be a useful seat if redesigned, and they agreed that was a possible solution.

By starting from these first principles, we can then narrow down product archetypes until we get to a collection that we then describe to users. At this point, we benchmark these against a literature review: Has anyone tried this approach before? Was it successful? What were the possible challenges?

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Jean Marc Feghali
Head of R&D
WeWalk

Q: Hi Jean Marc, Ive met you previously through UKRI Zinc and love your WeWalk cane. We created FLAG-Me Vision so community pharmacists can automatically identify people with sight impairments so they can be given additional support to avoid medication safety issues. Do you have any tips on moving from testing how representative the views of the 6-12 people who initially helped co-produce our system who are sight impaired, to conducting an accessible survey that we can distribute via RNIB?

A: Please thank Lisa for the kind words. I would need more information on the data collection and analysis methodology employed for this group of users. What is the research hypothesis of this broader survey? Please feel free to pass my email to Lisa and I can try to advise.

Jean Marc Feghali
Head of R&D
WeWalk

Q: Ideal patient centred digital health technologies can be designed and improved iteratively basis trials. What are your proposed solutions to make representation of older adults in technology design trials better, knowing the challenges in logistics, time required and ?compensation, knowing these are challenges faced by limited funded startups.

A: One approach for identifying and including older adults in technology design trials could be by taking the technology to them in community or healthcare settings. You could, for example, approach the management teams of care or assisted living homes, charities that support older adults (or those with a specific condition, if that is the focus of your technology) and/or community development organisations or groups for older people. You may find individuals or groups who are happy to take part simply to help create improvements for those experiencing particular (age-related) conditions, but in my experience providing funded refreshments for focus groups is always very well received.

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Katie Merrien
Owner
CommuniKate Design Limited

Q: Its is a struggle for many start ups, especially those that dont have connections to research/academic institutions to gain access to users for suitable itterative testing and design validation. Does the pannel have any recommendations for how to best engage with these users, both inside and outside of a healthcare environment?

A: You could also approach charities or third sector organisations who are currently supporting people with specific conditions or contexts. They may be able to suggest ways to engage those communities, and potentially even be interested in working with you (and the people they support) to enable co-design.

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Katie Merrien
Owner
CommuniKate Design Limited

Q: I was wondering if you have any examples of where products or services have been designed for people who are newly diagnosed with dementia, or perhaps even have not been diagnosed but may have symptoms that could indicate a diagnosis?

A: The Dementia Golden Ticket pilot, run by Buxted Medical Centre (in partnership with the local Clinical Commissioning Group, mental health trust, voluntary organisations, county council and the surrounding community) in 2018-19. The Dementia Golden Ticket was an innovative model of intervention delivered in primary care and the community that aimed to address gaps in the care pathway for people with dementia, which aimed to improve quality of life for the whole dementia journey; supporting the patient and carer. It was developed and trialled by NHS High Weald Lewes Havens Clinical Commissioning Group (now part of NHS Sussex Clinical Commissioning Group), and more details can be found in this Locally Commissioned Service (LSC) Specification from 2018-19: https://www.sussexccgs.nhs.uk/wp-content/uploads/2020/07/Dementia-Golden-Ticket-LCS-Specification.pdf

Katie Merrien
Owner
CommuniKate Design Limited

Q: Can Colum speak about the VOICE network at the Innovation Centre for Ageing/Design Age Institute - how can businesses access this?

A: Accessing VOICE at NICA is easy, just call them, but they charge for their services, as do most organisations who facilitate user access, testing and insight.

Q: How can we move from research and conversations to making impact in the real world?

A: with a lot of hard work, money and a supportive client/funder. There is no easy answer to this, but if you build nothing, nothing changes.

Colum Lowe
Director
Design Age Institute,
Royal College of Art

Q: my work @Norscot is related to the built environment and offsite construction, it includes kit homes design, windows and doors. I worked on a project for designing homes for ageing in place. There was an inclusivity challenge regarding some house features for a project I worked with, specifically when choosing interior doors interactions, pocket doors were recommended for wheelchair and mobility-aid users, on the other side, it was mentioned that these type of doors could cause confusion for people with dementia. At the moment we've implemented solutions depending on customer requirements. However, I'd like to ask the panel if there is a recommendation for approaching these type of challenges? (It was great to have Colum's feedback for that project in an earlier stage! Thanks a lot for that Colum).

A: One size can never fit all, the only answer to this question is to design in flexibility, and a budget to make alterations when the needs of the user changes.

Q: I found very interesting the point of keeping it simple not to use a lot of tech, I think for low and middle income countries this will be a starting point, in fact a central point. But, what techs are accessible for those countries?

A: The problem is rarely the tech, even the simplest of which can provide real benefits and insights. The question is the tech interface and encouraging user adoption, which is a significant Issue with no simple solution, yet.

Colum Lowe
Director
Design Age Institute,
Royal College of Art

Q: To Column, regarding inclusive design, do you use any sort of matrix in order to make these decisions for including or excluding things for example when designing a bus?

A: we have a variety of models we use, most of our own creation, to help understand problems and solutions, but never to be used as a 'paint-by-numbers, design by post-it note process'.

Q: I found very interesting the point of keeping it simple not to use a lot of tech, I think for low and middle income countries this will be a starting point, in fact a central point. But, what techs are accessible for those countries?

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Colum Lowe
Director
Design Age Institute,
Royal College of Art

Q: We work with charities in the digital space and a lot of them instantly jump to 'one stop shop' solutions to accessibility such as plugins, overlays etc for their websites. We spend a lot of time educating charities on accessibility/WCAG etc and about learning what accessibility actually is (through our own webinars, blogs etc) but we can't help them all. Have you any thoughts/suggestions/tips to help us help even more of them on the education side?

A: Not really, if we knew how to get widespread impact with minimum cost/effort we'd be doing it ourselves. All I will say is that perfection is often the enemy of good, and some education and adaptation is better than none, it's a process not a product.

Q: The design age institute looks really interesting, I look forward to reading more about it! Do you know of any similar institutes / groups that focus on design for visual impaired people?

A: Afraid not, other than the national charities who have their own programmes.

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Colum Lowe
Director
Design Age Institute,
Royal College of Art

Q: There are so many barriers to small companies and charities doing design research (Knowing how / recruiting co-designers / the time needed for funding support from UKRI! cash flows etc) How can academia help?
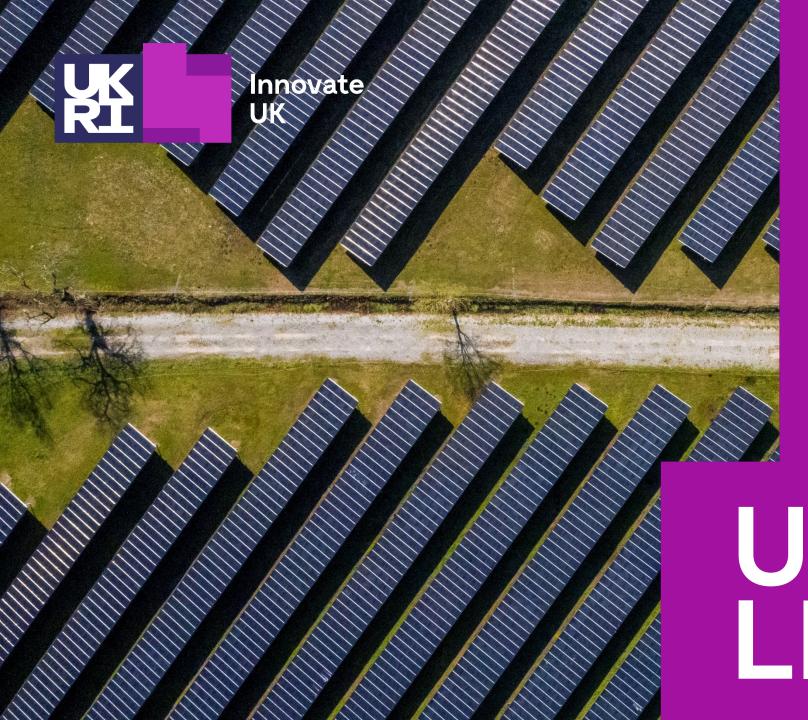
A: Programmes like KTP's are a really good way for academia to get involved. KTP's are Knowledge Transfer partnerships and bring together a consortium of businesses, designers and academics. https://www.ktp-uk.org/academics/

Q: How/where can we get support/funding re product design and deployment.

A: Watch out on Innovate UK KTN Opportunities pages, searchable by sector, for up and coming funding for innovative produce development and evaluation. Your innovation may be eligible for funding from schemes such as the Innovate UK Biomedical Catalyst.

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USEFUL
LINKS

Useful Links shared during the Event (1/3)

- www.deshca.co.uk
- www.moveitorloseit.co.uk
- www.carents.co.uk
- neurobox.co.uk
- https://pocketmedic.org/dementia
- www.showerspaah.co.uk
- https://www.housinglin.org.uk/Topics/browse/Design-building/InclusiveDesign/ISPA/about-ispa/
- StyleAbility.co.uk
- https://fewandfar.co.uk
- https://www.housinglin.org.uk/
- https://www.youtube.com/channel/UCvMrL2ojSzf7_jT3mr_Mi-Q

Useful Links shared during the Event (1/3)

- https://iuk.ktn-uk.org/programme/healthy-ageing-community/
- https://info.ktn-uk.org/p/2VFU-CQI/healthy-ageing
- www.steindesign.uk
- https://youtu.be/UiwdV2SmJRc?si=E3H9SUZ-B8dqy1C5
- https://wewalk.io/en/
- www.idoservice.org
- https://designage.org/
- https://cardsforhumanity.frog.co/ - a free resource for generating examples of people with different contexts which you can use to test your concept, service or product.

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Useful Links shared during the Event (1/3)

- https://magnificentmidlife.com/podcast/105-how-agetech-will-change-the-world-keren-etkin/

- https://www.stroke.org.uk/what-is-aphasia/communication-tools/getting-online-people-aphasia

You might find out getting online for people with aphasia guide helpful with your research. While it was designed for and with people with aphasia we know people who have been digitally excluded have found it a good starting point. (plus hard copies are free to order)

- https://ripple.designinformatics.org/

For anyone looking for a range of different research methods applicable to design for health, we've developed a handy online tool which introduces 30 different methods. Still a work in progress, so any feedback appreciated!

- https://designage.org/application/pathfinderprojects/

Link to the DAI Pathfinder open call