The social science is in: the ABC of socio-technical change theories, which all too often posit that education, nudging, or enforcement can effect social acceptance, is wrong. A change of A – individuals' Attitudes, will *not* automatically translate into B – Behaviour change, and ultimately C – Change in the system. Technocratic concepts equate social acceptance with behaviour change, evaluating the willingness of individuals to 'take' the technologies, policies, infrastructure innovations that experts devise. This hubris denies that there are factors that make technologies, policies, infrastructures more or less accept*able* for people – they may not be desirable, useable or effective for good reasons.

A socio-technical definition of social acceptance helps us understand these reasons. It sees acceptance as a process by which innovation becomes embedded in everyday practices, that needs to be supported by good design and creative, inclusive design methods. It enables a focus on enhancing the *acceptability* of solutions. This may imply careful attention to useability, and the context of appropriation, it may require wider systemic change, it will often depend on stakeholder value mapping, and methods of collaborative design and responsible research and innovation.

Guiding Questions

- 1. Who are the imagined users of the innovation? (e.g. is this specific in terms of place/social groups, or generic).
- 2. Is the 'useability' of the innovation discussed? E.g. its relevance to specific places, specific groups, specific situations?
- 3. Is the affordability of the innovation discussed? E.g. for specific places, groups?
- 4. Is the accessibility of the innovation discussed? E.g. in relation to disabilities?
- 5. Is the role of local and/or national government considered in the innovation? If so, how? What policy is needed to increase the innovation's societal readiness?
- 6. Which groups and communities are represented amongst participants (at events/webinars/ or in proposals)?
- 7. How have/ how will citizens and other stakeholders be involved in the innovation process for the technology/ solution(s) under discussion?
- 8. Which citizens/stakeholders?
- 9. At what point in the process?
- 10. Does the discussion of technologies/ solution(s) engage with issues of diversity? In relation to gender, age, equity, gender, age, class, ethnicity and other aspects of inequality.
- 11. Are the existing cultures in places, part of the discussion of transformation and change?
- 12. Are all end uses discussed alongside the technology, innovation, solution?

- 13. How does the solution contribute to the public good?
- 14. In what sense(s) is the innovation good for society?
- 15. Are the unanticipated consequences for society considered? (e.g. a fully digitised solution may be highly practical and fit for appropriation. However, it may introduce societally unacceptable levels of surveillance).
- 16. Have people had an opportunity to try out your innovation in their everyday lives?
- 17. Have multiple iterations of the design been undertaken/ is there a plan to do so?
- 18. What provision, if any has been made to support people in appropriating the innovation? How ambitious is this measured against what is possible?

Further Information

We are working on a <u>Societal Readiness Levels Framework in relation to Decarbonising Transport</u>. This has wider applicability, including in the domains of PPDR, and healthcare. We would welcome any comments

Examples

[under construction]

Resources

Bærenholdt, J.O., Büscher, M., Damm Scheuer, J., Simonsen, J. (Eds.) (2010) <u>Design</u> <u>Research. Synergies from Interdisciplinary Perspectives</u>. London: Routledge.

Danish Innovation Fund, 2019, Schraudner, Martina, Fabian Schroth, Malte Juetting, Simone Kaiser, Jeremy Millard, and Shenja van der Graaf. 2018. 'Social Innovation The Potential for Technology Development, RTOs and Industry. Policy Paper'. Fraunhofer.

Mankins, John C. 1995. 'Technology Readiness Levels. White Paper'. NASA.

Shove, E. (2010). <u>Beyond the ABC: climate change policy and theories of social change</u>. *Environment and Planning A*, 42(6), 1273 – 1285.