

Position statement : The limits of technology

Never just tech

Tech has supported society through the pandemic - businesses, schools, public services, and families have often been able to continue through a range of digital and communication platforms. But they have not supported everyone equally, and often exacerbate existing inequities. We need to be careful that using tech in a crisis does not create long term harms or normalise violations of, for example, privacy rights.

It is not just the end results of tech that must be equitable and just, respecting rights and privacy. The way tech is developed needs to be held to the same high standards. Even in a crisis. And it's not as if these methods don't exist. But we need to make sure that tech companies are open to them and use them, and that governments - in the understandable rush to take effective action - do not support inequitable processes of developing technical solutions in isolation from their real world effects. To do this, early involvement by regulators, researchers and open debate can be useful, as we have seen in the very different approaches and levels of success in contact tracing apps. But a key piece of thinking is that these problems are never just about tech.

"Never just tech" cuts at least two ways: firstly focusing on tech solutions risks ignoring existing or new offline or social solutions that may be more effective. Secondly, focusing on tech solutions risks ignoring the social aspects and impacts - particularly the potential for unevenly distributed harms - that are essential to take into account. But it also suggests that justice is absent from existing tech design, particularly larger platforms and particularly when balanced against the rapidly changing priorities during a crisis.

Never just tech is about embedding any technological responses to crisis in the social context(s) they are designed for. Any crisis response needs to take into account the specificities of different situations, and requires integration with operational and social (as well as political, economic, ...) systems. Technology is always a sociotechnical assemblage. If the worth of the technical component cannot be shown, then it should not be deployed.

Never just tech also means never just technologists, particularly in a crisis when the effects will be felt differently by different groups, more often than not exacerbating existing inequities. The other factors of the context and assemblage need to be taken into account when considering potential harms and rights, and the voices of those most affected need to be amplified. We need to centre those at the margins (as identified by, for example, [bell hooks](#), or applied to AI by [Abeba Birhane with Fred Cummins](#) or to the broader social impact of technology by [Ruha Benjamin](#)); we need to follow the principle of 'nothing about us without us' (brought to prominence through [disability activism](#) but also applied directly to tech by the [Our Data Bodies](#) project or [Sasha Costanza-Chock](#)); we need to take into account intersectional perspectives that highlight how any

individual's context is informed by multiple factors (as developed by [Kimberlé Crenshaw](#), and applied to online platforms by, for example, [Safiya Noble](#)). Particularly in a crisis, we should not be centring the data, the algorithm, the false sense of objectivity or the singular solutionism often sought by tech companies or policy-makers.

Never just tech means working with inclusive social contexts. If you cannot develop useful tools within the constraints of a social context, then you are not really innovating. But we need rapid ways of achieving this process of identifying the contextual specificities, amplifying affected voices, and building sensitive and culturally responsive technological aids. Many of these conceptual tools already exist, as outlined by, for example, [Ruha Benjamin](#) or [Catherine D'Ignazio and Lauren Klein](#). These approaches focus our questions around who - who is the technology by, who is it about and who is it for. And who decides?

Never just tech means emphasising relational narratives that resist the reductive categorisation inherent to top-down datafied approaches. Technologists and policy-makers need to take time to listen. This may seem counterintuitive in a crisis, but leaping on, for example, machine learning, AI and data-driven approaches too quickly will provide only short term solutions based on longer term past behaviours and (often biased) social contexts. When a crisis can quickly change the context, such data is often invalidated, and these approaches are ill-equipped to deal with evolving situations and longer term effects. We need to flip the focus, looking quickly to how the effects of a crisis are being felt, engaging with affected communities to listen to useful insights on how past crises and social problems have been felt, and develop longer term strategies to support those who feel these changes the most. The present crisis has shown that short term 'solutions' that ignore communities and public trust have been ineffective in providing any benefit, and have instead misdirected funds and focus from more contextually embedded solutions.

There are major risks in focusing purely on technology in a crisis. On a very practical level, a lack of trust and engagement will lead to resistance and a lack of adoption. This breakdown of trust will also have longer term reputational consequences and risks damaging collective responses. Any single solution adds to the fragility of already stretched infrastructure in a crisis, adding major points of failure carrying their own risks of unequal access. Rushing out tech solutions, without taking the social, political and legal context fully into account, can knowingly or inadvertently lead to practices later found to contravene rights or the law. Longer term risks to societal principles include direct harm to rights in the present but also the risk of normalisation of negative and inequitable 'solutions' in the longer term. Never just tech implores us to prioritise a range of sustainable, engaged and contextual solutions, and a wider range of voices in the decision-making and design process. Our responses to crisis should never be just tech.