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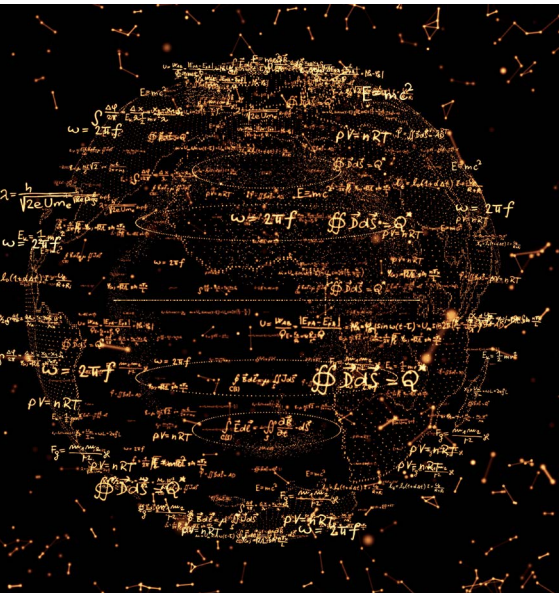
2020 ASSEMBLY REPORT



Is Technology Broken? Making Technology Inclusive, Fair, and Accessible

Insights from the 2020 CDAC General Assembly and Public Forum: Part Two

HOW BADLY IS TECHNOLOGY BROKEN? It has been held up as a transformational tool, one capable of lifting aid up to meet its growing twenty-first century challenges, a key part of the hope that aid could do more and do it better. And yet, today there are a growing number of doubting voices, a recognition that technology is not neutral and there are dangers as well as benefits to the rapidly expanding use of these ever more powerful tools.



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Anasuya Sengupta, founder of Whose Knowledge?, makes the point that today’s cutting edge technologies, such as artificial intelligence algorithms, have opinions of power embedded in their code and data sets. As broad conversations on the challenge of decolonising aid and systematically dismantling historic structures of power claim center stage, the role of technology can’t be ignored.

These concerns come alongside a growing disenchantment with the actual results delivered by technologists. While tech often arrives with bold promises, many initiatives end up doing little more than adding to a growing pile of ‘digital litter’. Catherine Green, from World Vision, recalled the discouraged words for an international innovation lab director: with nearly a decade of solid work behind them, she worried that her lab’s portfolio was more like a ‘closet of broken dreams’ rather than a bridge to the future.

Dozens of speakers at the CDAC 2020 public forum, Accountability in the Age of the Algorithm: Championing Pathways to Inclusion in Tech-Driven Futures, wrestled with these dual problems of equity and efficacy. They found many ways in which technology was broken, but also glimpsed a host of practical and meaningful paths forward.

Technology is a powerful tool in urgent need of change

There were honest doubts about the ability to fit every technology into the service of communities in crisis. Nanjira Sambuli and other speakers raised the possibility that in some circumstances it will be appropriate to ask hard questions about whether some technologies should be used in some contexts. This seems particularly true as new tools like artificial intelligence rush onto the stage, bringing exceptional potential for both positive and negative impact.

And yet, stepping aside from the use of a technology is far from an easy choice. Debates about technology’s risks take place against the backdrop of a global pandemic where international aid actors can no longer to put boots on the ground and local governments and civil society face multiple crises in health, education, work, and public safety. The world is in genuine need of powerful tools.

In this, technology offers hope. Helani Galpaya of LIRNEasia highlighted the progress that AI algorithms have already made in life-saving applications like early disease detection, as well as the future potential to build resilience when Internet of Things technologies make it possible to know the nature of a city in real time. She points out that even common forms of tech are valued in a crisis, with surveys showing that, for individuals at risk of disaster, the biggest perceived value of having mobile phone is the ability to act in an emergency.

This creates a deep strategic tension between those who would advance technology use and those who wish to control its risks. Dragana Kaurin, Director of the Localization Lab, highlights the risk of swinging too far in either direction, either blindly embracing all new technology applications or raising blanket objections. She proposes that civil society must find ways to address the embedded dangers that come with today’s technology, while guarding against the risk of being so critical that they are no longer helpful in driving good solutions.

Design technology that is inclusive, trusted and accessible

The juxtaposition of big needs and big challenges places substantial demands on those that create technology. As the forum title, Championing Pathways to Inclusion in Tech-Driven Futures, implies, developers and their sponsors must make more than an incremental shift in how they conceive, build, and deploy new technologies. Speakers repeatedly pointed out the need for a transformational approach to developing technology, one that is bottom-up, locally-grown, and adapted.



This is no easy challenge. Meg Sattler, from Ground Truth Solutions, observes that humans are fundamentally complex, as is their relationship to technology. This makes the design of new technologies more than a technical issue. Maesy Angelina from the UN Pulse Labs in Jakarta rhetorically asks: “When is something just a technical issue?” and quickly follows up with, “It’s always also a social and political problem.”

Coming from hands-on work with field-level innovations at the Response Innovation Labs, Catherine Green, from World Vision, has seen first-hand the difficulty of shepherding ideas from conception to scale in the complex environment of crisis response and resilience building. She points out that the innovation techniques and technology tools developed for use in commercial and private sector environments are often poorly suited to these low-resource and crisis settings.

A response to these challenges begins with the intentional inclusion of communities and groups that are often excluded from participation in the creation and use of technology. For Maesy Angelina, this involvement requires more than just providing a single session on feedback. Individuals and at-risk groups need to have an intimate role in shaping how technology will actually be used. In effect, activist Jac sm Kee says, their participation becomes governance.

Dragana Kaurin emphasises that establishing trust is a necessary condition for communities to make these informed choices and tradeoffs. Empowered technology users gain this trust when they have transparency around the proposed use, verification of compliance with their decisions, and the ability to opt-out and revoke their participation.

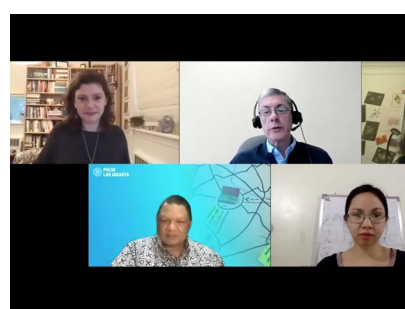
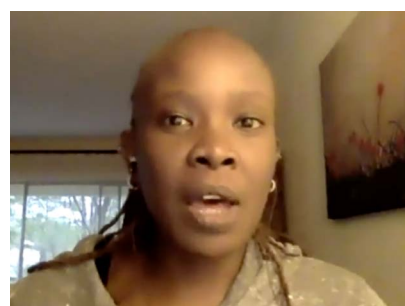
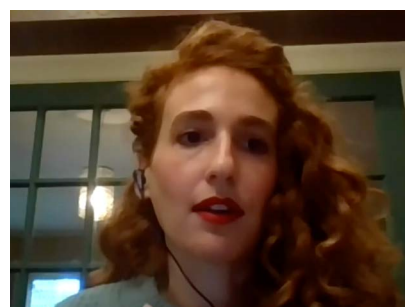
In this vision, technology development becomes about equity and inclusion as well as efficiency and efficacy. For example, Ellie Kemp of Translators without Borders observes that most people are bad at listening to those who use a different language, a point was seconded by M4H’s Zoe Hamilton, who advocates for user-centered design practices that are specifically suited to the unique needs of the deaf and other differently-abled individuals. Addressing these challenges may require more creative uses of technology, ranging from the development of AI systems to translate materials into a community’s language or expanding the use of non-written video and audio content.

Often this will force developers to walk ambiguous lines as they shape their applications. Anasuya Sengupta says technology systems must simultaneously encourage open sharing and transparency at the systems level, while assuring rigorous privacy at the individual level. Jac sm Kee points out that broadly adopting technology initiatives at scale (a recognised goal for most technologies) also creates distance between the creators and users, accumulates power for those applying the technology, and forces a common approach across multiple communities.

Bold action in technology is built on thoughtful guidance

In this challenging environment, placing all the responsibility for delivering equitable and inclusive technologies on the shoulders of developers is unreasonable. It’s also unnecessary. IOM’s Rob Trigwell makes the case that there are many opportunities to influence behaviours that shape technology in non-technical ways, such as developing shared ways of thinking, creating thoughtful guidelines, and establishing rules that direct purchasing and other control systems of crisis response organisations. Helani Galpaya points out that nuts-and-bolts technology standards, such as those that provided common alerting protocols across multiple countries, can help drive consistent and effective use of technology in crisis response.

A number of organisations have gone even further, convening communities with a direct stake in how technology is used to develop standards and guidelines that target hard issues. The World Association for Christian Communication (WACC) has created and published a “Digital Justice Manifesto”, while Jac sm Kee described efforts to shape a set of “Feminist Principles of the Internet”. She says this work is important because those working with technology “need a vision of what we want.”



Top: Geoffrey Kateregga; Second from top: Haley Slafer; Third from top: Nanjira Sambuli; Fourth from top: plenary discussion participants from Session Four: Decolonising Digital Governance and Ethics.



“Embracing technology’s thorny challenges, refusing to either ignore the issues or abandon the fight, has become essential to the mission of those who would help build resilience and capability in the face of crisis”

Building today’s technology requires new creative ecosystems

There is broad recognition of how messy these challenges are. Advocacy strategist Nanjira Sambuli observes that ‘systems thinking’ is the word de jour in aid sector strategy and this certainly applies to technology development. Technology creation and use should never happen in isolation from a complex world. As a result, she sees the need to address challenges of inclusivity and equity across a whole ecosystem of actors, tools, and resources.

Catherine Green concurs, pointing to the need to think through the messy parts of a technology application, even as pilot projects try to rush forward at breakneck speed. Ignoring the real-world complexity of technology initiatives eventually derails the impact of these innovations, such as in a programme in Somalia where a technology project became tangled in difficult issues surrounding who owned the data, who would do maintenance, and how data would be shared.

Helani Galpaya joined others in pointing out that the key failure points are often found in other areas, such as the need for broad access to connectivity infrastructure, or the development of digital literacy.

This complexity also creates opportunity. Haley Slafer of Safe Sisters sees a chance to apply ecosystem-level thinking to the development process itself, advocating for the creation of a network of support around women who want to design and build technology tools. Dragana Kaurin stretched the creative ecosystem in yet another direction, advocating for wise use of the private sector’s ability to fill crucial creative gaps in skills, hardware, and testing as well as providing a way to support long-term updates for systems.

It is time to make our imperfect tools better

Embracing technology’s thorny challenges, refusing to either ignore the issues or abandon the fight, has become essential to the mission of those who would help build resilience and capability in the face of crisis. There are aspects of technology that are broken. Fortunately, over two days of sessions that focused on Accountability in the Age of the Algorithm, speaker after speaker offered practices, ideas, and tools that could be applied to make progress on this unavoidable challenge.

Doing technology well, fostering equity, empowering communities, and protecting individuals from harm is far from easy. Yet, there is a clear ‘opportunity to make these imperfect tools work better.’



CDAC Network is a global alliance of more than 35 of the world’s biggest humanitarian and media development organisations – including UN agencies, the Red Cross/Red Crescent Movement, INGOs, media and communications organisations – committed to putting the power in humanitarian action back in the hands of communities. This report was developed by independent consultant Dan McClure.

[Watch all five sessions of CDAC’s 2020 Public Forum.](#) For more information, contact info@cdacnetwork.org.