What is MERL Tech?

MERL Tech is a term for the tools that enable monitoring, evaluation, research and learning (MERL). It also describes the wider field of work at the intersection of technology and MERL including:

- research and digital program design that incorporate existing evidence and good practice

- monitoring and adapting program implementation to meet changing needs and contexts

- evaluation and impact measurement of digitally-enabled programming and assessment of tech-enabled MERL

- learning and identification of good practices for digital MERL and digital programming

- application of learning to ongoing cycles of technology-enabled programming and MERL

- adjacent efforts such as digital transformation, data governance, data privacy policy and practice, design research, safeguarding, and inclusion

MERL Tech trends over time

Over the past decade clear trends have shaped digital-enabled programs and tech-enabled MERL.

Emergence of MERL Tech (2014)

In 2014, the term MERL Tech emerged. Attention to the possibilities of mobile phones in programming and in data collection and feedback began to soar. Participatory mapping, crowdsourcing of opinions, open data, and the use of GIS were applied for impact measurement. Innovation was the name of the game. The Information and Communication Technology for Development (ICT4D) space was highly active. The MERL Tech community came together to share and learn about digital tools for M&E and digital data at the first MERL Tech Conference.

Emergence of data privacy regulations (2016)

In 2016, digital tools were more common in the programs and in the MERL space. However, questions were arising about the "move fast and break things" era of innovation. Concerns grew around data privacy and the poor capacity of most organizations to safeguard data. Data governance and governance of large social media platforms began emerging as concerns as their potential use for manipulation and mis- and disinformation became clearer. Data privacy regulations emerged. The MERL Tech Initiative turned our attention to raising awareness about responsible digital data collection and use and ethical technology for MERL.

Emergence of big data in MERL efforts (2018)

By 2018, we saw more interest and attention focused on big data and its potential role in programmatic decision-making and in MERL. MERL Teams were focusing on management information systems, program and portfolio level evaluation, and "data lakes". Some began highlighting that rather than improve community engagement and ownership of development processes, most "ICT4D" was actually improving organizational efficiencies. Issues of inclusion, access and use of digital and the Internet remained despite the wider availability of smart phones at the global level. Concerns about privacy and surveillance continued rising as did worry that social media platforms were contributing to hate, genocide, polarization and blurred truth. More countries began adopting data privacy regulations. The MERL Tech Initiative worked to help the wider MERL sector adopt better data policies and practices.

Emergence of remote M&E due to COVID-19 (2020)

In 2020, the COVID-19 pandemic necessitated remote program and service delivery and remote M&E. Digital data collection was quickly adopted, while concerns about data quality and loss of contextual information came to the fore. The global rise in access to mobile phones and the Internet also meant more people around the world were using online digital platforms. Concerns about online harms, data privacy and security, and the role of platforms in conflict, mis- and disinformation continued increasing as did the emergence of specific regulations related to children and online safety. At the same time, COVID pandemic efforts led to emergency measures that allowed governments to collect highly sensitive data about people, spawning even greater alarm bells about surveillance. Global anti-racism awareness as part of Black Lives Matter movement brought a renewed focus on decolonization efforts.

Emergence of artificial intelligence in MERL (2022)

In 2022, artificial intelligence in the form of "generative AI" and "natural language processing" hit the mainstream and the MERL Community started exploring how these tools might support various evaluation related processes and tasks and whether they could improve efficiency and quality. Governance of social media platforms became a more mainstream conversation due to the effects of social media on children's mental health. Use of big data and predictive analytics continued to grow, as ever more sophisticated ways to analyze data became more common in development, humanitarian and MERL spaces. Earlier concerns about the reliance on remote program and service delivery and remote M&E manifested in growing worries about quality of remote education or healthcare, and about data collected remotely. Late in the year, ChatGPT and other Generative AI tools took center stage and The MERL Tech Initiative began plans to host a Natural Language Processing working group to further explore the role of these tools in MERL.

Mainstreaming of Generative AI and Natural Language Processing (2023)

In 2023, The emergence of commercially-available, mainstream artificial intelligence (AI) in the form of NLP tools like ChatGPT, Bard, LLaMa, and image generating tools like Stable Diffusion, Midjourney, and DALL-E. This was a key moment in the evolution of

digital technology and is expected to usher in a new era that will have huge effects on people, communities and societies in every sphere. The MERL Tech Initiative began convening the NLP-CoP regularly and working to understand the effects of emerging AI in programs, operations, and MERL.

Privacy