The #Data4COVID19 Review:
Learnings From COVID-19 and Recommendations For Future Crises

The GovLab sought to evaluate how non-traditional data[1] (NTD) was used to respond to the COVID-19 pandemic around the world.[2] It developed four briefings about how non-traditional health, mobility, economic, and sentiment data have been used during COVID-19 and identified several lessons and recommendations for future data-driven crisis management. This document summarizes the key takeaways from this effort. Our intention is to raise awareness of the growing potential of NTD use during crisis management while also demonstrating its limitations. Learn more by visiting our website or reading the full report.

Top-Level Findings From COVID-19
There are several commonalities in how non-traditional data has been used throughout COVID-19. These commonalities are summarized below.

- Officials called for the use of NTD to answer questions where and when traditional data such as surveys and case data were not sufficient or could not be leveraged. However, the collection and use of traditional data was often needed to validate insights.
- NTD was primarily used to understand populations' health, mobility (or physical movements), economic activity, and sentiment of the pandemic. In comparison with previous dynamic crises, COVID-19 was a watershed moment in terms of access to and re-use of non-traditional data in those four areas.
- The majority of NTD initiatives were fragmented and uncoordinated, reflecting the larger fragmented COVID-19 response. Many projects were focused on responding to COVID-19 after outbreaks occurred reflecting an overall lack of preparedness for the pandemic.
- NTD initiatives frequently took the form of cross-sectoral data partnerships or collaborations developed to respond to specific needs. Many institutions did not have the systems and infrastructure in place for these collaborations to be sustainable.
- NTD initiatives involving granular, personal data were frequently implemented without the necessary social license to do so–leading to public concerns about ethics and hindering public trust in non-traditional data.

Lessons Learned
The GovLab's analysis of the non-traditional health, mobility, economic, and sentiment data briefings demonstrated ten lessons learned about how non-traditional data initiatives were designed and implemented. These lessons are summarized below:

- ***The need for a social license:*** Public and private sector organizations frequently developed NTD initiatives without the necessary social license–the degree to which an initiative aligns with expectations of the general public and other stakeholders. Organizations rarely had any frameworks (developed in consultation with the public) before the crisis to guide the activities they undertook.
- ***The need for a clear value proposition:*** When purpose and value proposition were clearly defined, trust and impact were higher and partners were better aligned. Articulating a value proposition demonstrated to be a crucial way of ensuring projects can be sustained long-term without becoming victim to "pandemic fatigue."
- ***The need for systematized data collaboratives:*** Most collaboratives were developed haphazardly and in an ad hoc manner due to the lack of clear methods and tools. Many were short-lived and limited in impact.
- ***The need to plan for political realities:*** Political realities often determined what insights from NTD were used and which ones were deemed less relevant. Organizations needed to understand what decision-makers and the public needed as well as the geopolitical environment before jumping into action to produce insights that could meaningfully inform decisions.
- ***The need to prioritize equity and data rights:*** Organizations often did not seem cognizant of the ways that benefits of NTD initiatives could be unevenly distributed, exacerbating pre-existing inequalities. For those that did recognize the importance of ethics and equity, they lacked a systematized approach in how ethics and equity would be integrated throughout implementation.

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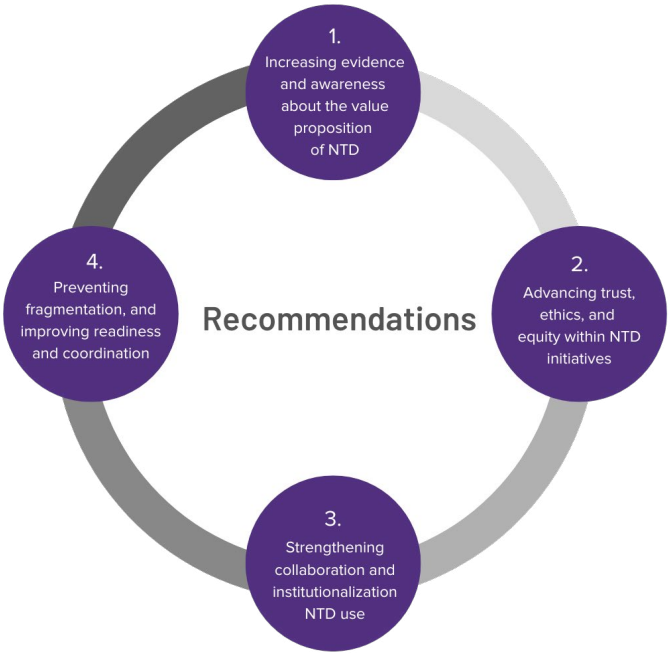
1 *See the "What is Non-Traditional Data" document*
2 *The GovLab undertook this in-depth study with the support of the Knight Foundation*

- ***The need for crowdsourcing:*** Crowdsourcing through well-targeted surveys was frequently needed to address gaps in NTD initiatives.
- ***The need for coordination:*** There was little coordination between projects leading to various instances of fragmentation and misalignment among NTD actors across the data lifecycle and pandemic phases. This led to various instances of duplication and difficulties finding relevant data.
- ***The need for an evidence base:*** The absence of evidence base on the value of NTD for pandemic response hampered a more sophisticated use (and conversation). Organizations did not have models to follow and did not know in advance which types of data initiatives would yield the best results.
- ***The need for non-personal data:*** Non-personal data–data that does not include personally identifiable information–provided rapid insights about the state of COVID-19 of different communities and populations. Additional guidance is needed on how to combine these initiatives with personal data sources.
- ***The need to continue growing NTD initiatives:*** While the robustness and volume of COVID-19 NTD initiatives have declined, these efforts have accelerated new ways of working in the public sector. There is an opportunity to apply these initial investments to new use cases beyond the COVID-19 response.

Recommendations For Future Dynamic Crises

There is an opportunity for decision makers to reevaluate these successes and failures and take steps towards the responsible use of NTD for crisis response. Below we provide four categories of recommendations that decision makers can use in preparation for future crises. While these recommendations are public health focused, they can be applied during other types of crises. More detailed information about how each recommendation can be operationalized is included in the full report.



1. ***Increasing evidence and awareness about the value proposition of NTD:*** There is a need for a stronger evidence base that can generate awareness of current NTD practices and support the value proposition of NTD during crisis situations. Creating a more data-driven approach to using NTD (that is, having more data about how to use data) can broaden NTD initiatives and ensure they can grow beyond pilot programs and proofs of concept during future crises.
2. ***Advancing trust, ethics, and equity within NTD initiatives:*** There is a need for public and private organizations to establish trust among parties and with society on how NTD is being used. Prioritizing trust, ethics, and equity at the start of and throughout NTD initiatives can increase the legitimacy of its use and more meaningfully resolve crisis-driven challenges based on a combination of NTD and lived experience.
3. ***Strengthening collaboration and institutionalization of NTD uses:*** There is a need for multi-stakeholder partnerships to increase the data capacity and speed of implementation of NTD initiatives in a systematic way. Institutionalizing internal professional functions and external partnerships through data stewards can accelerate the use of NTD during crises.
4. ***Preventing fragmentation, and improving readiness and coordination:*** There is a need for a more coordinated approach–across all crisis management efforts and functions–to address needs both as health systems evolve and as institutions face future public health emergencies. Minimizing fragmentation has the potential to increase readiness for future dynamic crises.