

Proposal for a network on big data for development¹

Proposed network function and structure

Network objective

The network's objective is to fund policy relevant research in and on big data for development in the Global South, and develop capacity amongst researchers from the Global South.

Funded Research

The network will fund two types of research in the Global South:

- 360° research: These would look at key issues at a national and/ or regional level and could also serve to articulate situational readiness for the uptake of big data for development at a national level, sub-national level, and/or in a particular developmental sector. Themes that are explored could include issues related marginalization, privacy, security, rights, competition, etc. Research proposals under this category would be in the range of USD 5,000 to USD 15,000 each.
- Applied big data for development research: to implement big data analyses and support capacity building. Research under this component would look at conducting big data analyses for a particular developmental sector and be linked to the policy making process. Given both the economic and transaction costs associated with setting up a big data analyses project and negotiating data access, the call under this research component would also allow extensions to ongoing research projects. Research proposals under this category would be in the range of USD 50,000 to USD 150,000 each.

If research has a specific country focus then it will have to be a country from the Global South. Whilst researchers from any part of the world can submit proposals, primacy will be given to proposals that include Southern researchers as part of the team, especially in the case of the applied big data research.

Network activities

The network will focus on both foundational mapping as well as capacity building. Other activities to be undertaken by the network include publishing, facilitating research collaboration, information sharing, and to a lesser extent advocacy. The network through its administrative partner will also periodically organize meetings, conferences, and workshops for the purposes of capacity

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development, sharing and synthesizing research outputs, and to facilitate policy enlightenment and impact.

Membership

Whilst lacking a formal membership structure, the network would consist of individuals in academia, civil society, industry and other from a range of backgrounds (social, legal, technical etc.) with a common focus/interest on big data for development. The members would provide a multidisciplinary perspective on big data for development and conduct the research.

Governance structure

The primary mode of governance would be through an international scientific advisory board drawn from experts in the Global South as well as the Global North. Board members would have expertise in aspects of big data for development either through data analytics, prior work on the implications of big data on society and the economy, and/or expertise in developing and implementing policy that leverages big data. The board will also screen and approve research proposals submitted to the network and board members will be selected to review research outputs as well. The board members can also apply for research funding from the network, but will have to recuse themselves from involvement in the decision making process. The board will be paid since they will not only draw up the call for proposals, develop a selection criteria, review proposals, as well as review outputs from research funded by the network.

Research Coordination

The network will have a central administrative partner with minimal footprint. The role of the research coordinator is to act as a liaison between the advisory board and members both in the submission of proposals as well during the research process, and be in charge of handling the research contracts. With the guidance of the advisory board, the research coordinator will also commission synthesis reports as well as coordinate meetings (virtual and physical) as the case may be.

Network structure

From an administrative perspective this is a star model. But the network decisions are made by the international advisory with meetings often held virtually. However this doesn't preclude the possibility of regional hubs emerging in the second and third years.

Variations

Research Coordination & Governance structure

The proposed structure above has a star model with one research coordinator so as to minimize the administration costs. Other variations are possible:

- One possible option is a hub-spoke model optimized around thematic areas (e.g. privacy, marginalization, etc.), analytics, and/or around geared towards policy enlightenment and advocacy. Each hub will have its own advisory board fulfilling the tasks as outlined for the proposed option above. However the advisory board for each hub is drawn primarily from experts in the hub's thematic area, but ensuring representation of experts in other aspects of the big data for development eco-system. Each hub will act as the research coordinator for their thematic area.
- Another possibility is to have regional hubs. The advisory board for each would then place primacy to both subject as well as a regional policy focus amongst its board members. This is to facilitate deeper policy engagement and stronger research to policy linkages in the region.

Research

Whilst the proposed structure envisages two different funding mechanisms for different types of research, other variations are also possible without a specific delineation in terms of the focus (i.e. research ON big data for development versus analytical big data for development) and/or funding amount (but still with an upper limit of USD 150,000):

- One possibility is to focus purely on applied big data for development research focusing on specific thematic areas. One such option is linking big data analysis to specific SDG indicators. Researchers could receive funding to either conduct exploratory analyses or to leverage existing analyses that could be replicated in countries in the Global South that could measure/monitor specific SDG indicators.
- Another possible option is a top-down policy implementation-driven approach that promotes collaboration between researchers and policy makers in the Global South to engage in big data analyses to influence specific development policies that have already been identified.

Membership

While the proposed structure promotes an informal membership structure, another option is a network that revolves around an exclusive community of academic researchers who are currently conducting big data analyses. While funding would be provided to these researchers, they would have the option of collaborating with other actors in government, industry and civil society to conduct the research.

