

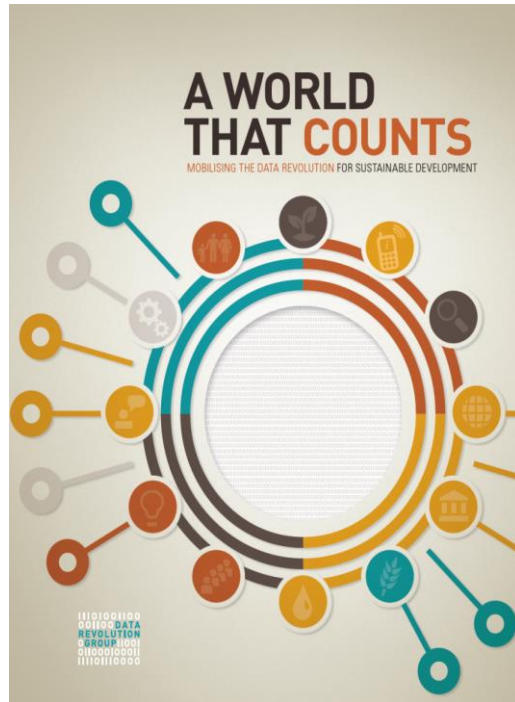
COUNTING ON THE WORLD

Building
Modern
Data Systems
for Sustainable
Development

Shaida Badiee,
Co-chair of TReNDS

[Available at: http://unsdsn.org/](http://unsdsn.org/)





DATA-POP ALLIANCE
White Paper

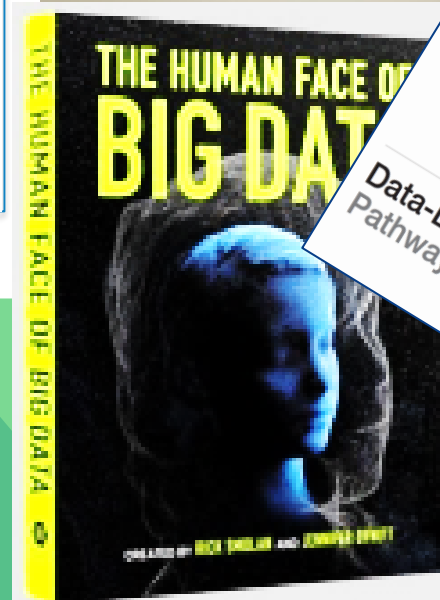
The Law, Politics and Ethics of Cell Phone Data Analytics

April 2015



WORLD BANK GROUP

DATA POP ALLIANCE



Data-Driven Development Pathways for Progress

WORLD ECONOMIC FORUM
COMMITTED TO IMPROVING THE STATE OF THE WORLD

D4D challenge in Senegal

Specific long-term initiatives

the Economist | World politics | Business & finance | Economics | Science & technology

Ebola and big data


Waiting on hold

Mobile-phone records would help combat the Ebola epidemic. But getting to look at them has proved hard

Oct 25th 2014 | From the print edition

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INCENTIVES FOR THIS REPORT

- A lot of excitement about harnessing the data revolution.
 - A lot of entities trying to do interesting, small-scale pilots to test new methods and technologies.
 - A real commitment from across the UN and governments to try and harness the power of the data revolution.
 - But very little guidance on how to do it.... A World That Counts and Cape Town Global Action Plan were the first steps,
 - But need to take a long-term view and think about the eventual systems we are trying to create.
 - **What does a new data ecosystem look like? How is it governed? What capacities are needed to get there?**
 - It can't be designed by the UN, member states, or private companies alone.
 - Requires multi-sectoral / multi-stakeholder systems thinking.
 - Need to think about needs of SDG agenda, but also Sendai, Paris and countries' specific requirements.
- 



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A MODERN STATISTICAL SYSTEM...

A 21st-century data system that is fit for purpose to both monitor and achieve the SDGs should help governments to:

1. Plan and prepare for the future,
 2. Manage and govern more effectively,
 3. Monitor historical progress.
- 

.... AND HARNESS THE SKILLS OF A HUGE ARRAY OF DATA PRODUCERS.

Data producers	Expertise	Incentives	Roles	Responsibilities
National statistics offices (NSOs)	Data collection and compilation of official statistics from the census, surveys, or administrative systems. Knowledge of international standards and methods.	To ensure government policy is informed by quantitative and (in some cases) qualitative evidence. Receiving funding from central government, and funding from the international community.	Production of essential official statistics such as population and vital statistics; national accounts; and other social, economic, and environmental statistics. Coordination and expert review of other data from across government and from non-governmental actors.	To ensure high-quality, consistent production of data on government performance and data for SDG monitoring.
Other government departments	The compilation of sector-specific administrative data (such as health or education information) or technical skills using certain software like ministries of planning or environment using geographic information systems (GIS).	To develop data systems that can help improve service performance and efficiency and/or target resources most effectively. Receiving funding from central government and the international community.	Production (or co-production with the NSO) of sector-specific datasets relating to health, education, agriculture, etc.	To use data to improve service delivery and effective, responsive governance. To share these data with the NSO and across government.
United Nations agencies, the World Bank and the International Monetary Fund (IMF)	Technical expertise in survey methodologies and the collection of sector-specific statistics, including poverty and economic data. Detailed knowledge of international standards and cross-country approaches.	To improve the quality of internationally comparable data, to target resources most effectively. To show leading sectoral expertise and access central U.N. funding.	Technical advice to NSOs. Verification and standardization of national-level data into internationally comparable estimates. To facilitate agreements on standards, etc.	To support national processes and build local capacity, rather than parachuting in with technical skills.
Bilateral donors	Expertise derived from the production of official statistics within their own high- or middle-income countries. Targeted investments to improve program delivery or organizational efficiency. Data-based or informed program design and delivery.	To build systems capable of tracking investment impact. To ensure more responsive, accountable and transparent government partners. To create a culture of transparency and data-sharing to attract foreign investment and minimize risk.	To fund statistical capacity development. To identify new international data partners. To facilitate peer-to-peer learning between statisticians across countries (in the Global North and Global South).	To fund basic, core statistical capacities where the government is unwilling or unable. To support national processes and build local capacity, rather than parachuting in with technical skills. To provide resources to support the independence of the NSO.
Universities and academia	Sector-specific data production, data cleaning, and analysis. Highly trained and qualified specialists.	Funding and high-level recognition and use of their work.	Specialist data compilation and/or verification. Providing additional capacity where there is a government shortfall.	To interrogate official statistics against official standards and offer supplementary or complementary evidence.
Private companies	Market and consumption data, expertise in managing big data and big data analytics.	Philanthropy and/or public service. Public marketing and branding. Government contracts.	Providing consumer data and/or big data analytics to complement and/or supplement official statistics.	To make open and available non-sensitive social, environmental and economic data. To maintain respect for individual data privacy and to agree upon an ethical data-sharing framework.
Citizens and civil society groups	Community-level data collection (often qualitative), citizen-generated data, data mapping, data literacy and/or methodologies not being pursued by government. Data communication and data-based advocacy.	To provide a check on government and private company data collection, utilization and communication. Public recognition. Changing policy and mindsets.	To produce complementary evidence (often qualitative) to cross-check official statistics and make them more accessible to ordinary citizens. To produce a deeper layer of analysis that humanizes statistics.	To interrogate official statistics and offer supplementary or complementary evidence. To monitor issues the government is unwilling or unable to measure.

SO HOW DO WE BREAK DOWN INSTITUTIONAL BARRIERS, FOSTER NEW PARTNERSHIPS, AND BUILD CAPACITY?



GOVERNANCE AND LEADERSHIP

1. Changing role of NSOs
2. SDG Data Roadmaps.
3. A High-Level Panel on the Data Revolution.
4. Expanded UN Statistical Commission (& IAEG-SDG).



PRINCIPLES AND STANDARDS

1. A new global Data Compact.
2. Committee(s) to develop detailed standards to ensure data integrity across public and private actors.
3. International agencies support LICs to establish:
 - essential data protection safeguards like data protection laws,
 - strong legal and regulatory data frameworks within which non-governmental actors should operate.

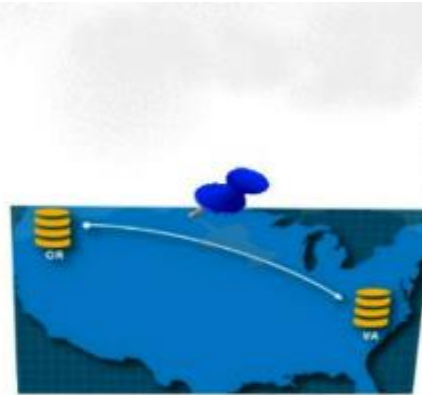
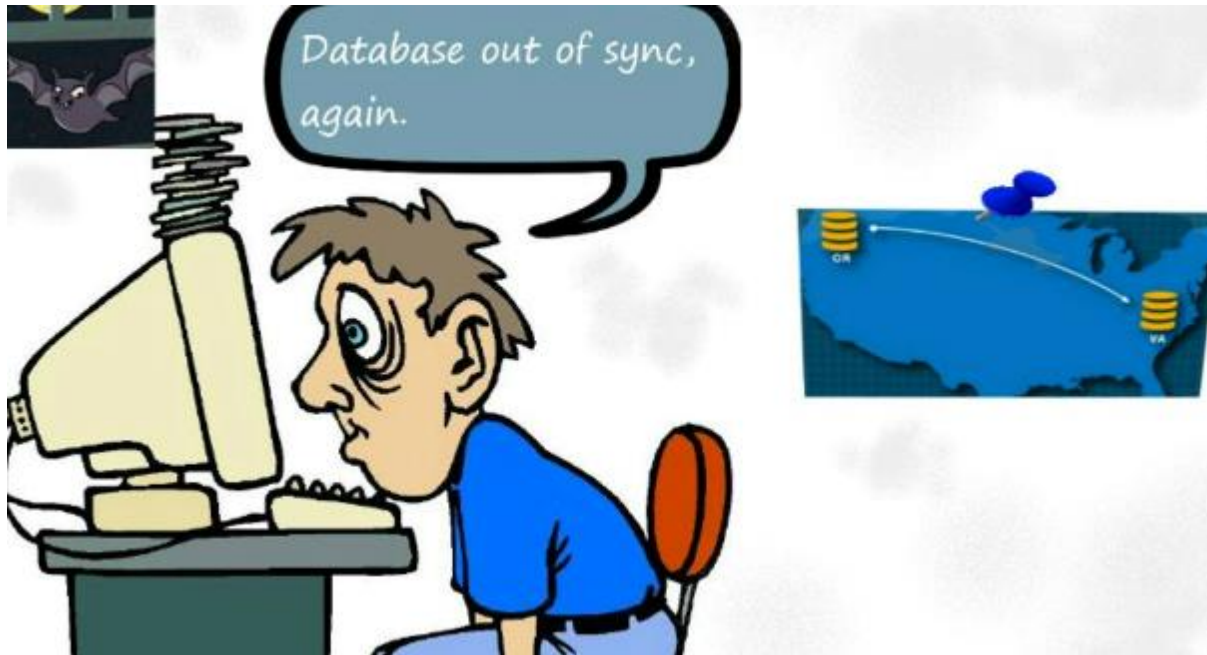


TABLE 4: TOPICS REQUIRING COMMON STANDARDS BETWEEN PUBLIC AND PRIVATE DATA PRODUCERS TO ENSURE DATA QUALITY AND INTEGRITY

<p>Design</p> <ul style="list-style-type: none"> • Common statistical definitions and collection units • Sample sizes • Levels of disaggregation (including the five categories recognized in Agenda 2030: sex, age, geography, wealth and disability) • New technology to reduce costs and speed up production. 	<p>Collection</p> <ul style="list-style-type: none"> • Regularity of collection • Timely publication of data soon after collection • Security and confidentiality of the microdata • Opt-in and opt-out measures • Cost efficiency • Common documentation standards such as Data Documentation Initiative (DDI) • Advance Release Calendars
<p>Analysis</p> <ul style="list-style-type: none"> • Open data standards to enable public analysis (data producer as a signatory of the Open Data Charter) • Open algorithms to enable access to private company data • Microdata held in possession of the data producer, not transferred for reuse without prior public consent • Data quality assessment frameworks: what are the recommended features and how the assessment process is done. • Analytical methods, tested and proven, are documented and shared. 	<p>Dissemination</p> <ul style="list-style-type: none"> • Aggregate data is openly available to general public • Data is shared in an accessible, user-friendly format • Data related to specific SDG indicators is reported to a national statistical entity on an annual basis (NSO/CDO/national review board) and where relevant to an international entity (UN Statistical Commission) • Common dissemination standards, like Statistical Data and Metadata eXchange • Data use and user feedback are monitored.



TECHNOLOGY, INNOVATION AND CITIZEN-LED ANALYSIS



1. Data sharing: Annual data sharing challenge at WEF.
2. Interoperability: Update UN Classifications Registry.
3. CGD: Creation of a "City Group".

CAPACITY AND RESOURCES

1. Partnership between UNSC and UNESCO / GPE for data literacy training in schools.
2. A global financing facility for statistics.
3. GPSDD-facilitates a global PPP sponsorship platform for national statistical capacity.





TRENDS
Thematic Research Network
on Data and Statistics

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