

Democratisation of Data in an emerging economy with focus on Africa

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What will be covered...

- Paper reliability
- Focus/context of the paper
- Why democratized data
- The African context
 - Resistance to democratization
- New dawn in data world
 - Free data leading to innovations
 - Controlled freedom within democratized data
- Sustainability of democratized data
- The future is here



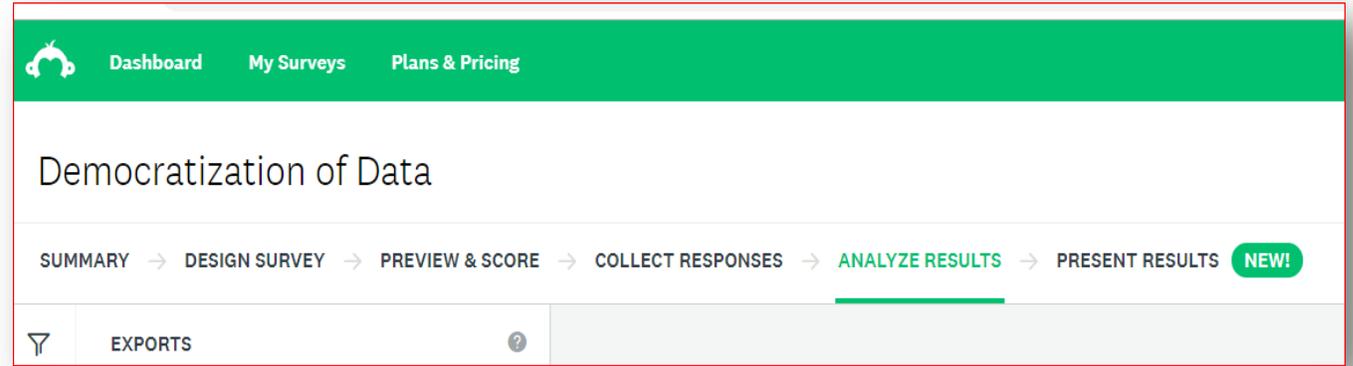
Reliability of the paper

1



1. The data in this paper was gathered from IITA 24 research stations spread across Africa between 2017 and 2019

2



2. The research spanned across young and experienced scientists/researchers from different parts of the continent using workshop, interviews, questionnaires and surveys methods

Context

1



1. The sources are well informed with the data generated from their research work being funded by various donors
2. The paper focused more on research data but provide little insight to data generated for business purpose also



Why data democratization?

- Data generated from public funds is made available to the public in digital format (Bernard, 2017)
- Power of the people. About 10 years ago, health records are collected in papers but today, it's accessible online based on permissions.
- Deliver the right information to the right people at the right time (Bruno, 2013).
- Support innovations
- Prevents re-inventing the wheel
- Encourages start-ups





Before... in Africa

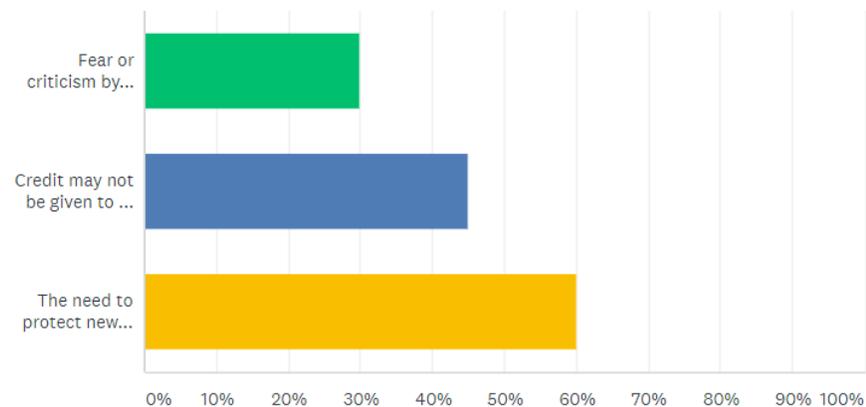
- Scientists held on to 'their' research data
- Important data are lost in-transit, by accident, stolen or crashed systems.
- Donors repeat funding for the same research, thereby not promoting new discoveries.
- Absence of open access/data policy, MEL and compliance strategy
- Data plagiarism uncontrolled.
- Lack of DMP
- Lack of institutional support



Resistance to democratization of data

What are the fear associated with making your research data open? Choose all that is applicable to you.

Answered: 20 Skipped: 1



| ANSWER CHOICES | RESPONSES |
|---|-----------|
| ▼ Fear or criticism by other researchers if error is spotted in the data or publications associated with the data | 30.00% 6 |
| ▼ Credit may not be given to the original data collector | 45.00% 9 |
| ▼ The need to protect new discovery from the data collected | 60.00% 12 |
| Total Respondents: 20 | |

- It's my effort and my data, why should I share it with the public?

Why the resistance to democratization of data

- From workshops, 3 reasons were identified as major reason for the resistance to democratization of data:
 - Fear of criticism
 - Plagiarism
 - Data and (Intellectual Property) discovery protection
 - Lack of trust institutional systems
 - Government buy-in is low
 - Poor awareness
 - Resistance to cultural change
 - Ethical and legal

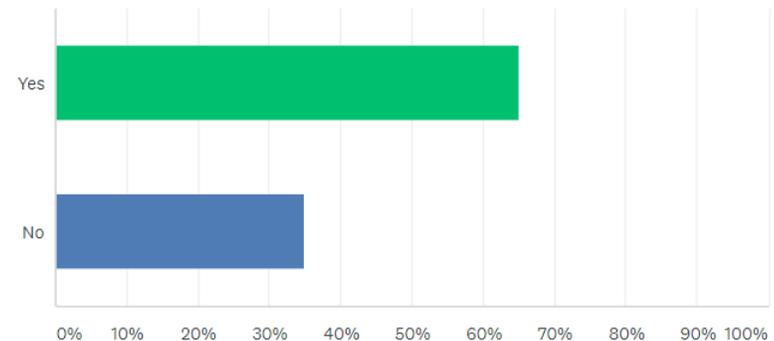
New dawn in data world is a new dawn in Africa

- Open access is receiving more acceptance
- Institutional support and data democratization culture is gaining more grounds
- The new crops of young scientists wishes to contribute to body of knowledge more than the old scientists
- The number of young scientists is growing and their influence in open source, open access, knowledge sharing, and open data is leading the new revolution



Will you be happy if your data is used for commercial purpose without any monetary reward for you?

Answered: 20 Skipped: 1



Leading to innovations

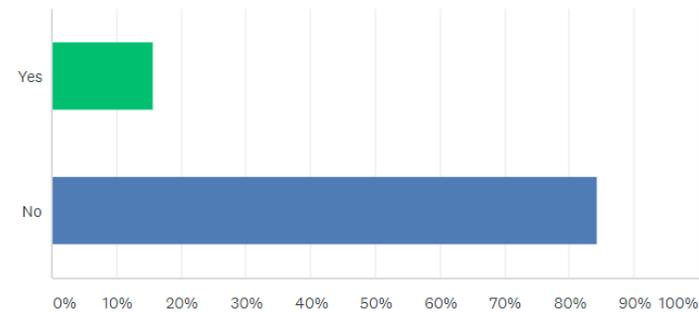
- New digital start-ups emerging. E.g. FarmCrowdy using democratized data to develop e-Farming strategy in Nigeria
- Wealth creations from apps developed from democratized data. eHealth has developed plant yield prediction app using open data
- *Africa, with the continent with the highest population of youth (UNDP), is witnessing systematic leverage of big data taken from democratized data to develop home-grown technologies like EdTech, Agritech, TechEd, etc.*
- Improved health from health-related data and awareness as a result of democratized data

Controlled
freedom with
democratized
data

- Hey! You mean I should leave my secret in the hand of a parrot?

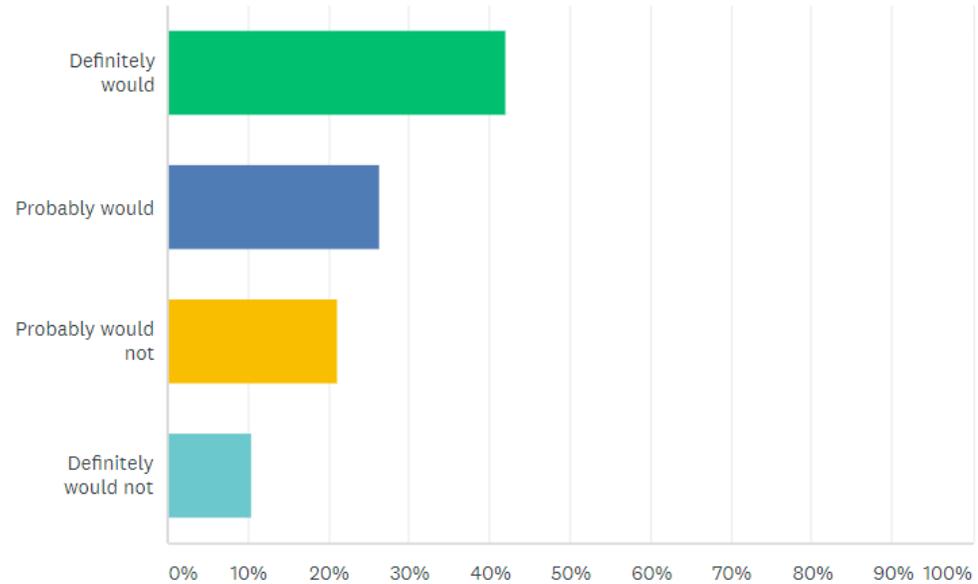
Will you be willing to make your research data open while the project is active and you have not written any paper on the project?

Answered: 19 Skipped: 2



Will you be willing to provide the entire raw data collected in your research or will prefer to hide some important elements before making the data open access?

Answered: 19 Skipped: 2

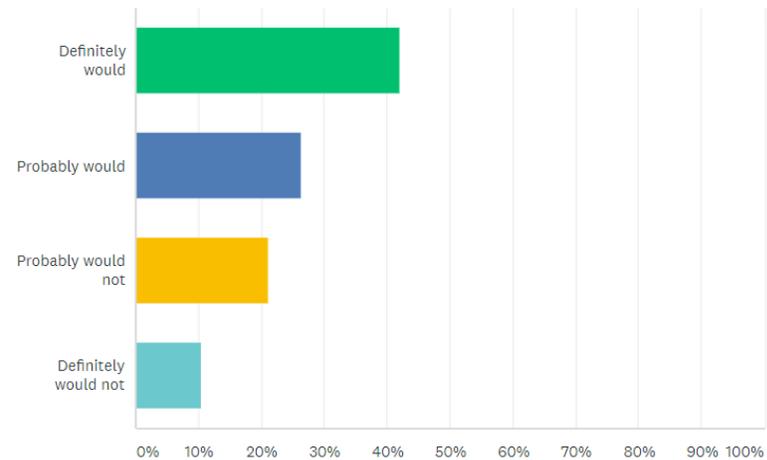


| ANSWER CHOICES | RESPONSES |
|------------------------|-----------|
| ▼ Definitely would | 42.11% 8 |
| ▼ Probably would | 26.32% 5 |
| ▼ Probably would not | 21.05% 4 |
| ▼ Definitely would not | 10.53% 2 |

Sustainability of data democratisation

Will you be willing to provide the entire raw data collected in your research or will prefer to hide some important elements before making the data open access?

Answered: 19 Skipped: 2



| ANSWER CHOICES | RESPONSES |
|------------------------|-----------|
| ▼ Definitely would | 42.11% 8 |
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Could we say Africa has embraced the democratisation of its data?

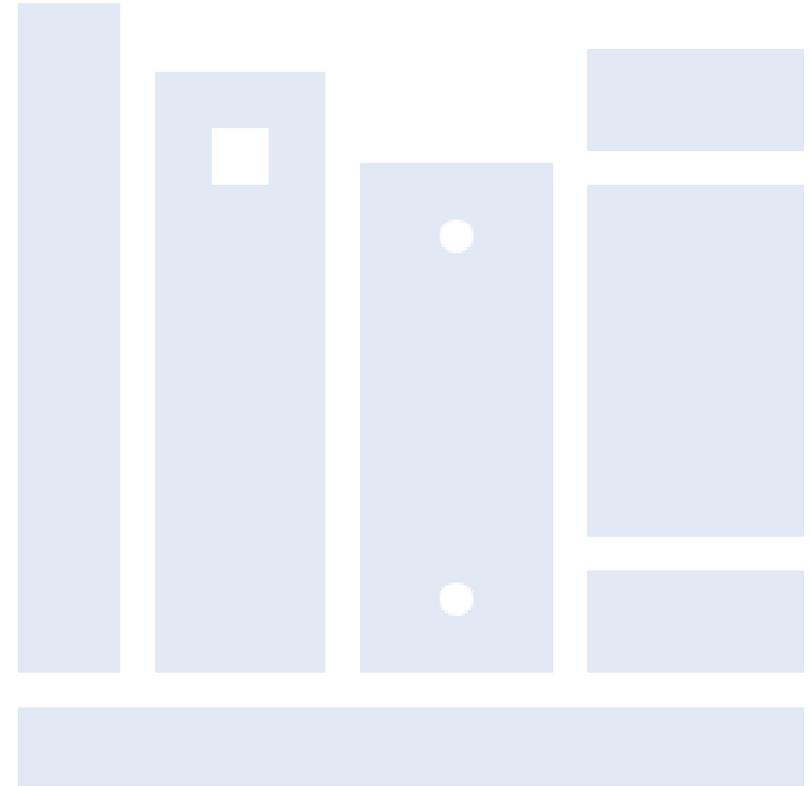
- Hmm! Somebody help!





Outlook... The future is here

- There is a gradually shift of norms in the way data collectors, data custodians, data stewards respond to the ability of making research data public.
- Democratisation of data is evolving and nascent in Africa but the future is bright



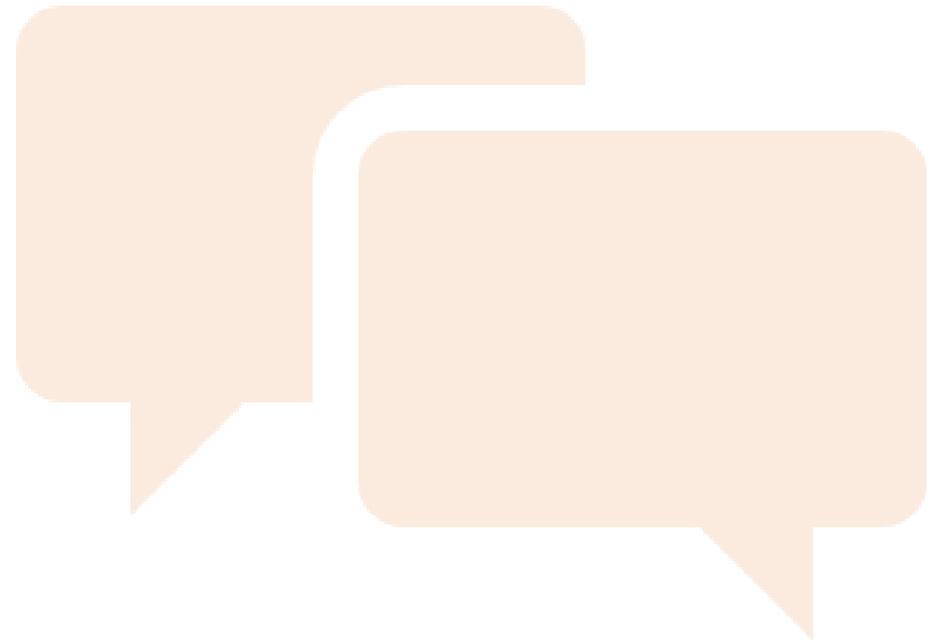
References

- Bernard Marr (2017) What is Data Democratization? A super Simple Explanation and The Key Pros and Cons, Forbes, <https://www.forbes.com/sites/bernardmarr/2017/07/24/what-is-data-democratization-a-super-simple-explanation-and-the-key-pros-and-cons/#52926d736013> [Online]
- David S. Sawicki & William J. Craig (1996) The Democratization of Data: Bridging the Gap for Community Groups, Journal of the American Planning Association, 62:4, 512-523, DOI: [10.1080/01944369608975715](https://doi.org/10.1080/01944369608975715)
- World youth population: http://www.africa.undp.org/content/rba/en/home/blog/2017/8/7/africa_defining_challenge.html [Online. Accessed: May 2019]
- Survey can be accessed from: <https://www.surveymonkey.com/results/SM-XCBG5K7XV/> (Obileye Olatunbosun M., 2019)



Q&A

- Got some questions for me?
- I'm listening





Thank you!

