Capacity building and smart investments for innovation: What is needed in developing countries?

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Partnership in Statistics for Development in the 21st Century

Context

- Huge demand on NSO's to produce more and better data
- Existing new opportunities
- Old problems persisting

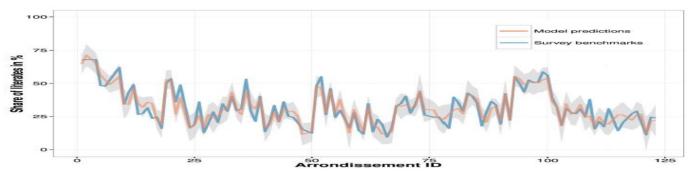
>> What role for big data – what impact on capacity development?

Big Data Paradox in development

- Great need given huge demand
 - SDG's 230 indicators
- Opportunities:
 - leap-frogging
 - cheaper, real-time, granular
 - data in new areas

D4D project results

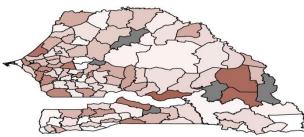
Model validation for literacy rates

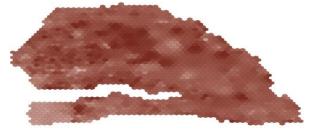


Model results

How we see it:

How we **could** see it:





Source: Bruckschen et al. (2015). Cookbook for a socio-demographic basket: Constructing key performance indicators with digital breadcrumbs.

Big Data Paradox

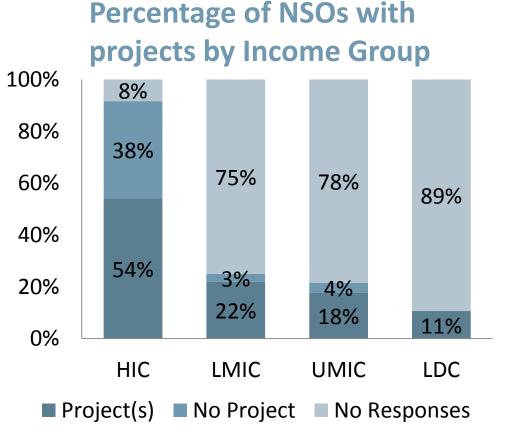
- Risks
 - Same as in developed countries

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 governance and legal framework not in place – weak to manage them

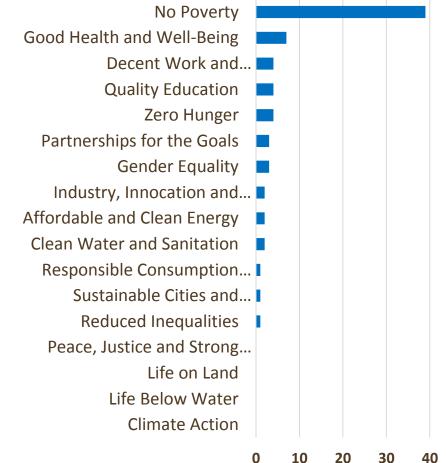
<u>Reality of today</u>: not many big data projects to produce official statistics in place

Big data projects by NSOs



Source: 2016 Global Survey of the Task Team on "Big Data for SDGs".

Count of projects by SDG Goal



0

20

30

40

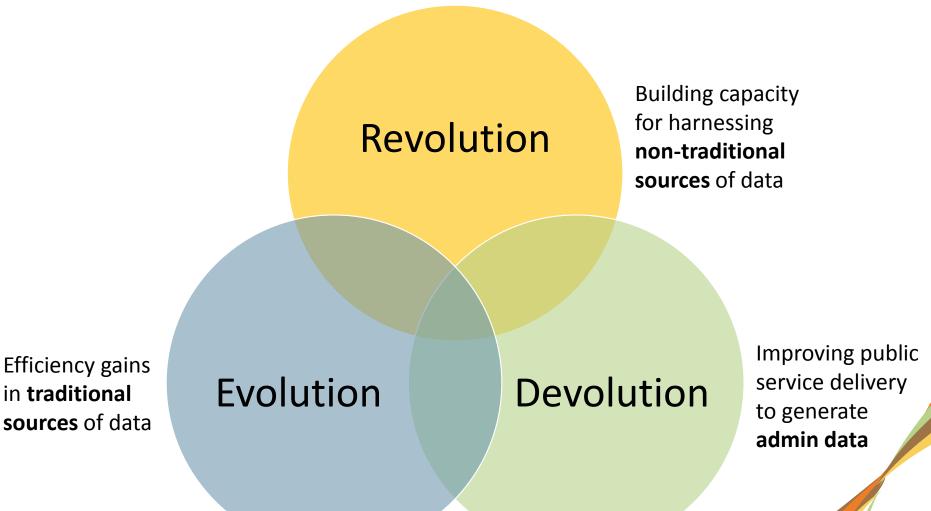
Smart investments in innovations

A working definition:

Smart investments ...

- enable revolution, evolution and devolution of the statistical system at large
- 2. respond to national needs and demands
- 3. encourage new forms of partnerships.

Smart investments



Tablet-based HH surveys

Case-study for 13,000 HH in East Africa

18k

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Paper-based data collection: \$230k

62k

Training

& TA

146k





101100 01011

Print & binding

Transport

9.5k

Data processing

Office for processing

Desktops for processing

10k

16k

Supervisors for processing

Data collection with Android tablets: \$96k



Tablets



& peripheral





Equipment field supervisor

Cost-savings in Data Processing over 3-years is 60%

Source: PARIS21 (2015). A Roadmap for a Country-led Data Revolution.

PISTA: Platform for Innovations in Statistics

Identification & Classification

Statistical Capacity Assessments



Development Data Innovators





Informing Modernisation Processes



To find out more, go to pista.paris21.org

Summary

- Big Data part of the solution, in developing countries for some time smaller part
- Innovation key and critical look at all of them: technical, institutional and governance
- Smart investment in innovation calls for supporting a comprehensive approach to capacity building

Questions

- Should NSOs in prioritise big data or statistical essentials?
- Should NSOs invest in data literacy to manage big data or leave it to the private sector?
- How do we ensure that investments in big data projects results in crowding in of national capacities?