

10 EMERGING DATA TRENDS

Regional Training Course on SDG indicator
15-19 October 2018, Daejeon, Republic of Korea

TECHNOLOGY

Innovations. Change lives.



China

1.4 billion



India

1.35 billion



Facebook

2 billion



Illiterates

750 million

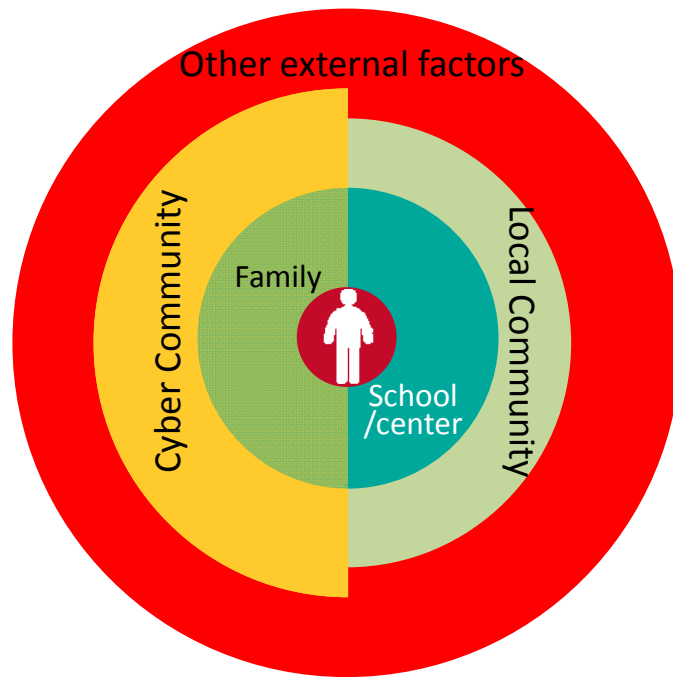


**WHAT ARE the EMERGING
DATA TRENDS TO SHAPE
FUTURE EDUCATION**

1

LEARNERS' CENTERED

Learners'
centered



Can technology enhance learners to better interact
with all

2

**SECTOR-WIDE
APPROACH**



3

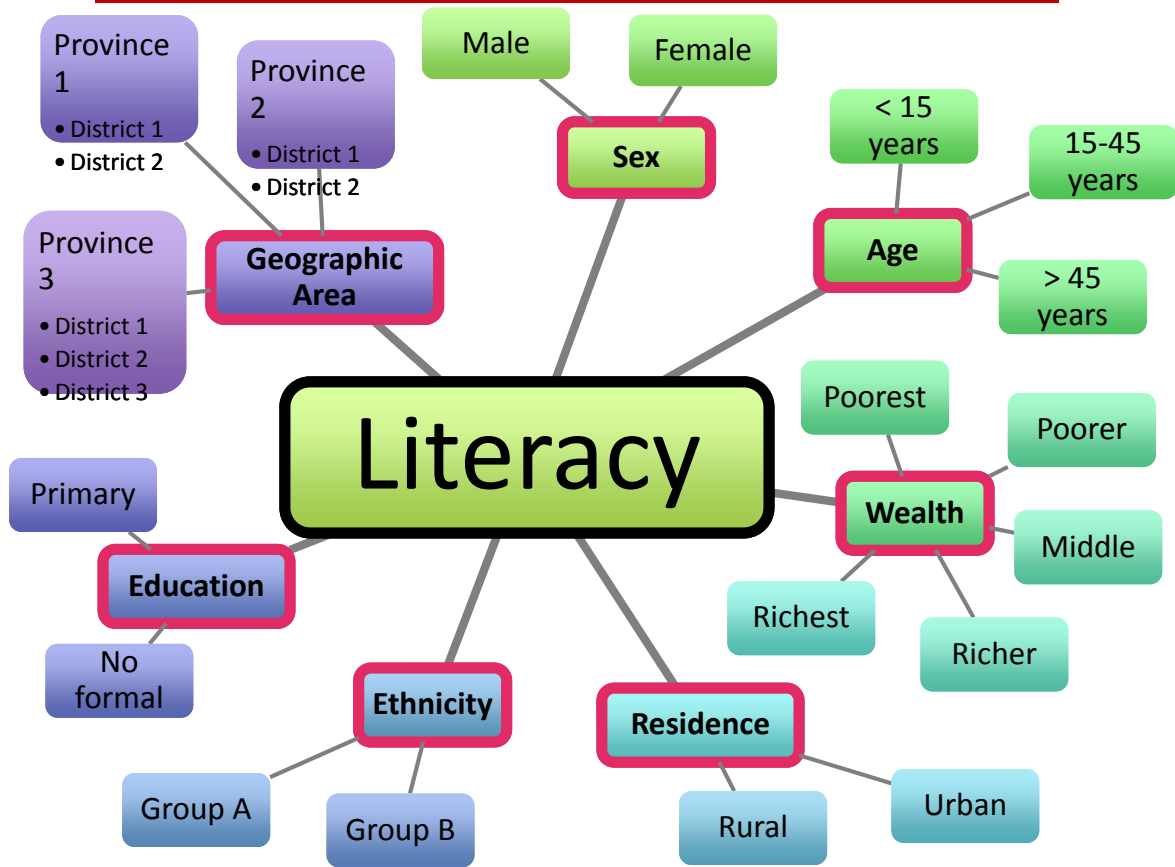
NO ONE LEFT BEHIND
DISAGGREGATION



Finding a poor ethnic children living at very remote area whom is illiterate because of her disability

Insert 11 reaching the unreached group

Finding a poor ethnic girl living at very remote area whom is illiterate because of her disability



4

NATIONAL TO LOCAL

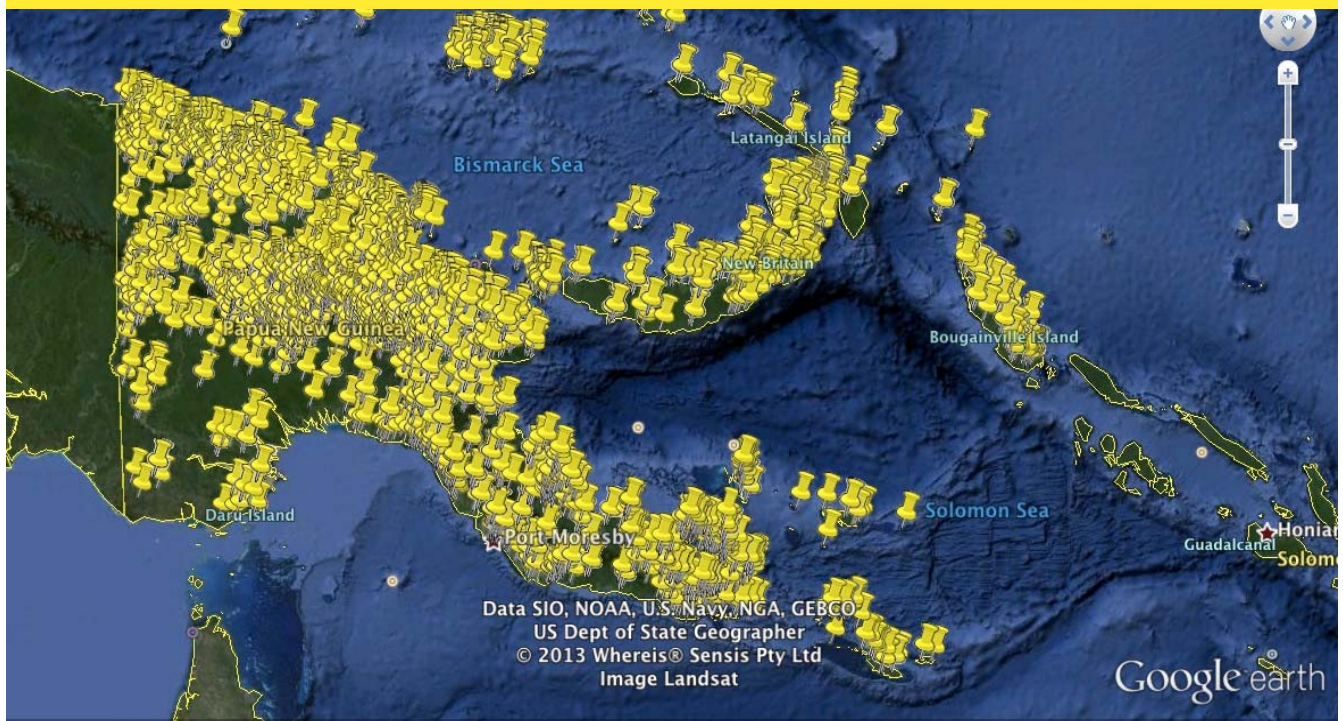
DRILL DOWN

Schools in Papua New Guinea



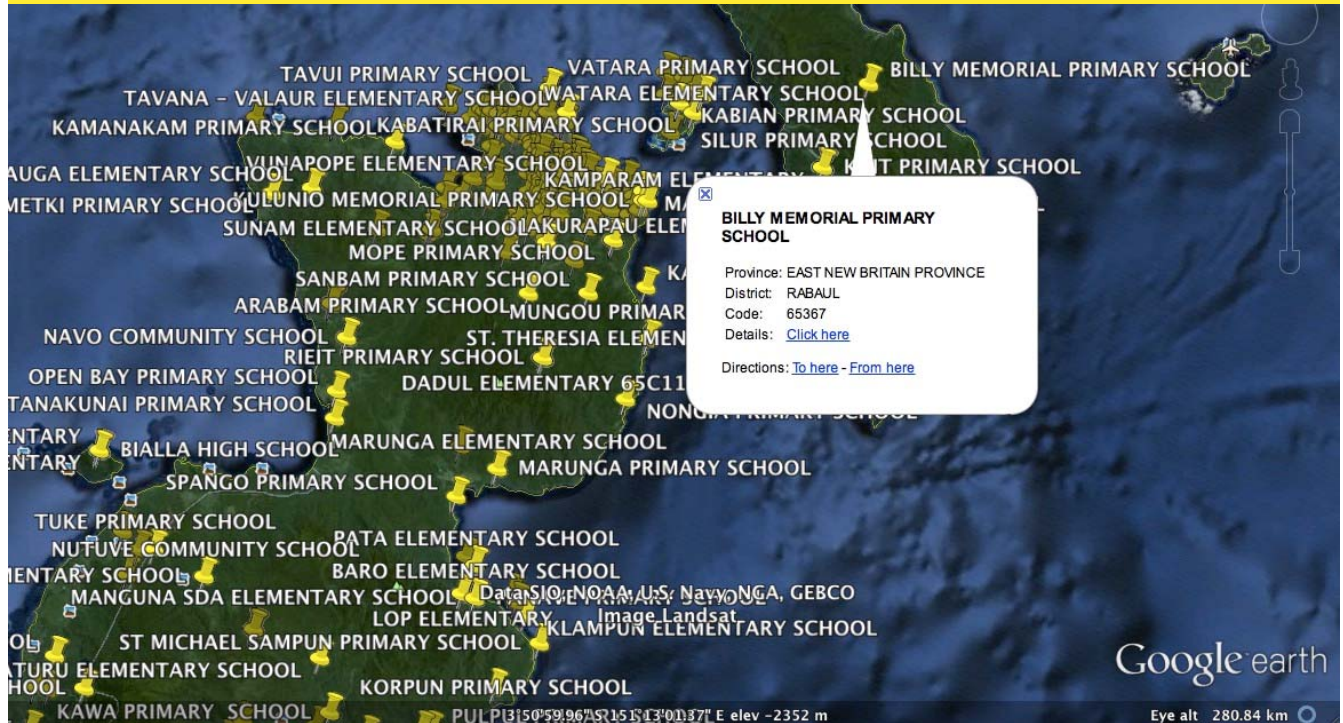
DRILL DOWN

Schools in Papua New Guinea



DRILL DOWN

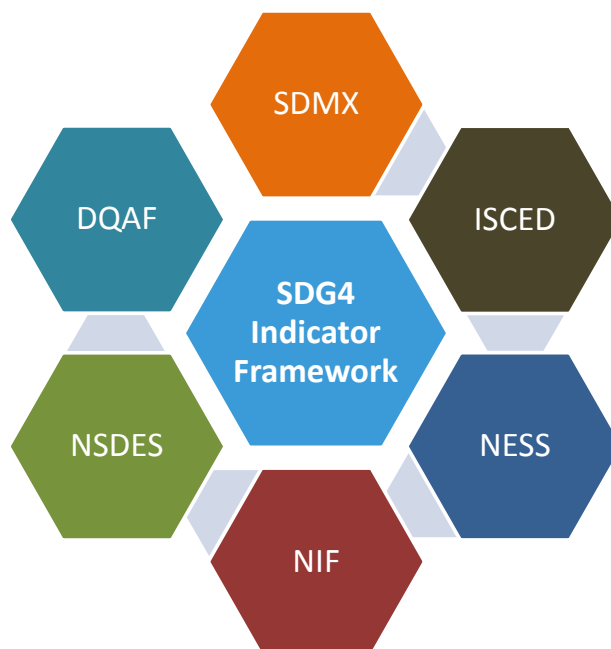
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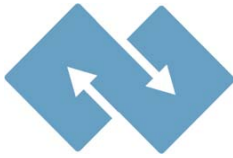


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STANDARDS

Norms and Standards

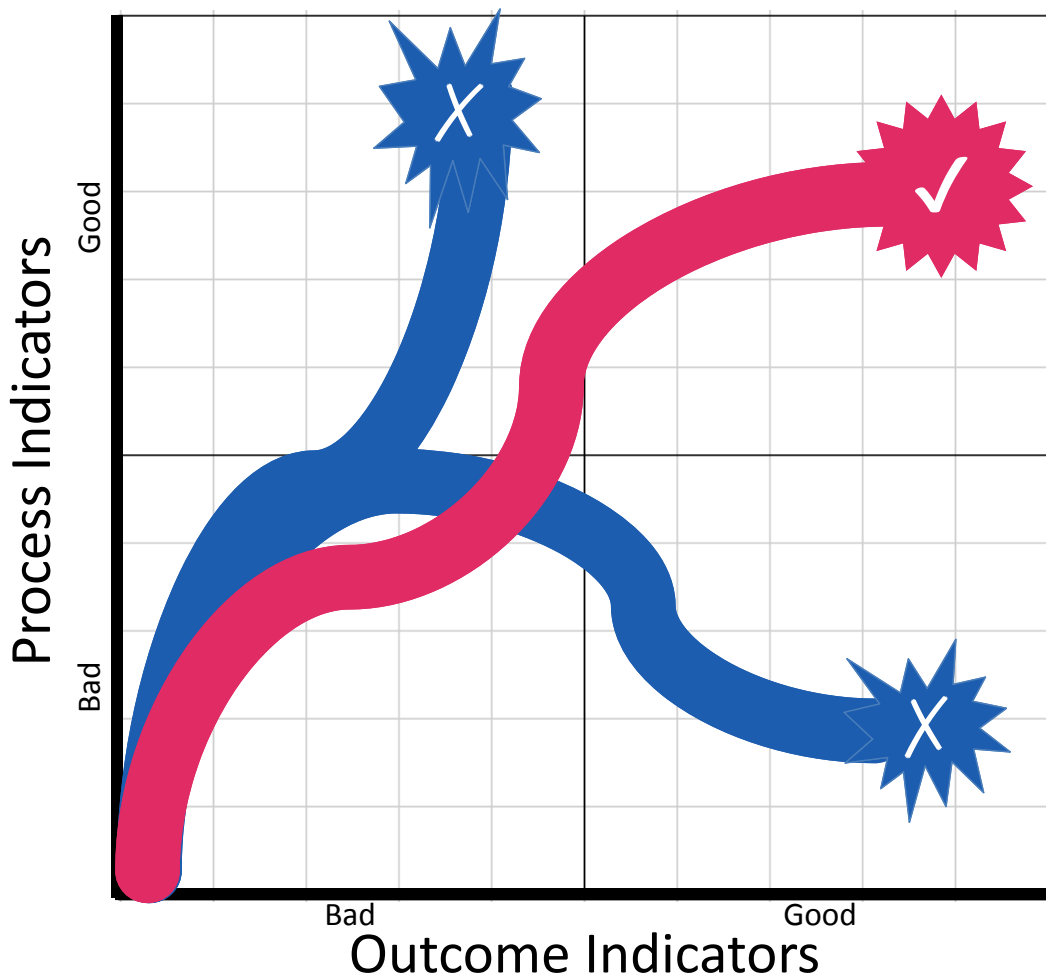
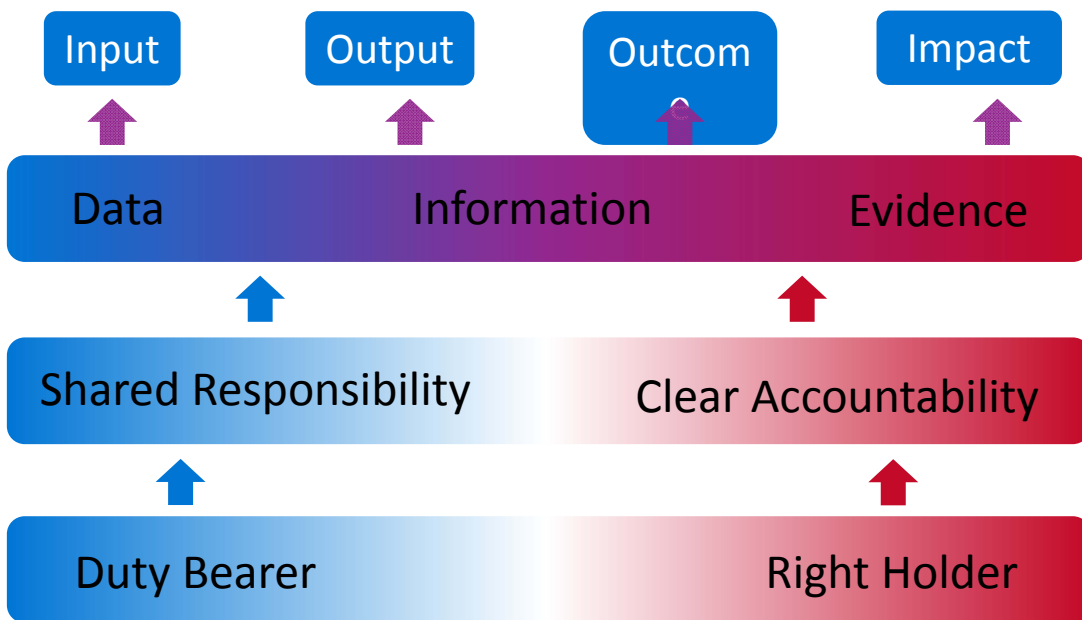




SDMX Data Flows for SDG Indicators

6

HUMAN RIGHTS



7

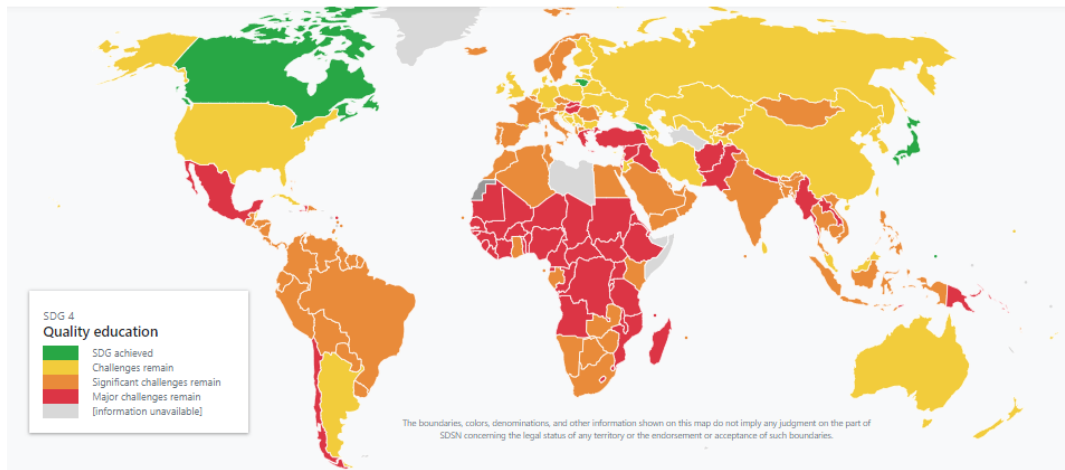
VISUALIZATION

Dashboards

SDG Index and Dashboards Report 2018
Global Responsibilities: Implementing the goals



BertelsmannStiftung



Sustainable Development Goals

<https://dashboards.sdgindex.org/#/>

Select one of the 17 SDGs to see it on the map or display the global index



DSS – Decision Support System

FRAMEWORK

INDICATOR

Baseline - Target

Status

Planned - Actual

| Indicator | Responsible party | ESDF Reference | Legislative Requirement | Status | Baseline | 2011 | 2012 | 2013 | 2014 | Target |
|---|-------------------|------------------|---|-------------------|----------|----------------|-------|-------|-------|--------|
| Schools receiving block grants (Number) | DOF (DOP, DPC) | Page 33, Page 34 | Ministerial Instruction and guidance on utilization | Planned Actual | 1,000 | 1,500 1,021 | 2,000 | 2,500 | 3,000 | 4,000 |
| NER (Percent, 5 year old) | DPPE | Page 22, Page 33 | Ministerial Decision on early childhood | Planned Actual | | | | | | |
| NER (Percent, 3 year old) | DPPE | Page 22, Page 33 | Ministerial Decision on | Planned | | | | | | |

Profiles

Data at a glance



EDUCATION POLICY AND DATA CENTER
Making sense of data to improve education for development

EDUCATION IN AFGHANISTAN
QUICK FACTS (July 2015 est.)

- Population: 32,564,342
- Compulsory Education: Grade 9
- Language of Instruction: Pashto and Dari (official), English
- Academic Year: March - November

<http://uis.unesco.org/en/country/kr>

EDUCATION IN THE UNITED STATES

2013/2014 Total: 450
2014/2015 Total: 471

Undergraduate: 44%
Graduate/Other: 56%

| Scale | U.S. Grade Equivalent |
|--------|-----------------------|
| 90-100 | A |
| 80-89 | B |
| 55-79 | C |
| 50-54* | D |
| 0-49 | E |

Participation in Education

Number of out-of-school children
Number of out-of-school assessments

Primary education by sex

<https://wenr.wes.org/tools-resources/country-profiles>

Eatlas

Data at a glance

<http://uis.unesco.org/en/visualisations>

<http://uis.unesco.org/apps/visualisations/oosci-data-tool/index-en.html#en/KHM>

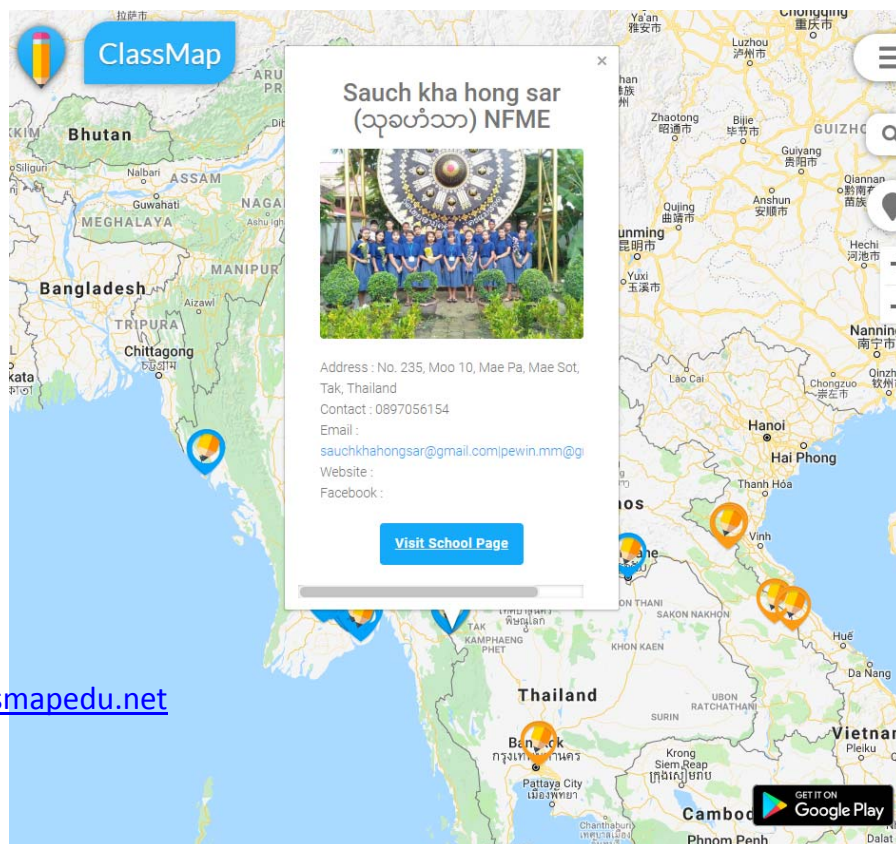
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REAL-TIME

Responsive decision for education

| <i>Data Source</i> | <i>Frequency</i> | <i>Coverage</i> | <i>Cost</i> | <i>Quality</i> | <i>Report</i> |
|-----------------------|------------------|-----------------|-------------|----------------|------------------|
| Population Census | 10 years | Subnational | Very high | High | 1-2 years |
| Household Survey | 3-5 years | National | High | High | 1-2 years |
| Administrative System | On-going | Subnational | Low | Medium | <u>Real-time</u> |
| Online/Mobile Survey | On demand | Varies | Low | Low | <u>Real-time</u> |

Responsive decision for education



www.classmapedu.net



 Bangkok Office
 Asia and Pacific Regional Bureau
 for Education


ClassMap

**A real-time online mapping platform to make
 all schools visible and match with potential supporters**

**Plot your school location
 with basic information!**

**Prioritize supports
 needed for your school
 & learning centres**

**Get connected with
 potential supporters!**

www.classmapedu.net



FREE DOWNLOAD
 GET IT ON


www.classmapedu.net/

For more information, please contact:
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BIG DATA

FOUR V

Volume

The quantity of generated and stored data.

Variety

The type and nature of the data. Big data draws from text, images, audio, video; plus it completes missing pieces through data fusion.

Velocity

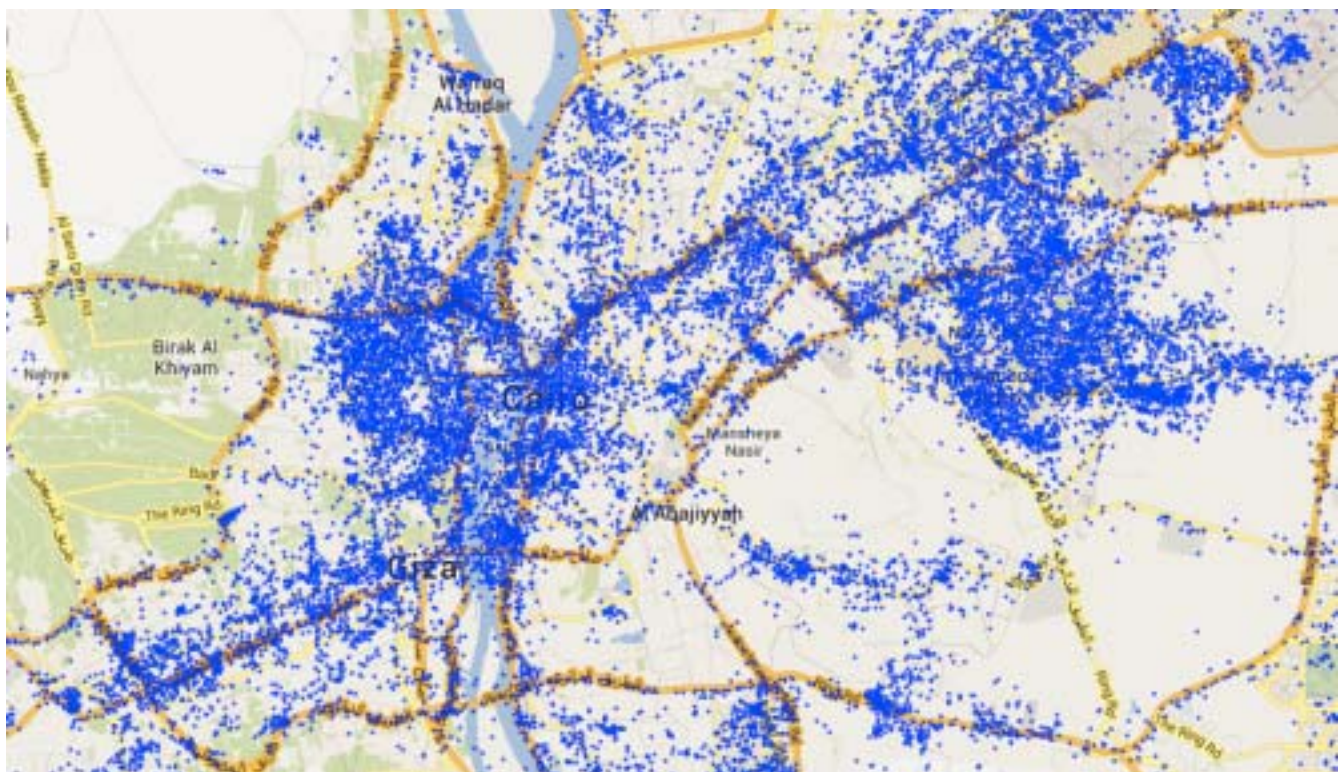
In this context, the speed at which the data is generated and processed to meet the demands. Big data is often available in real-time.

Veracity

The data quality of captured data can vary greatly, affecting the accurate analysis.

Cairo poverty levels

Can Twitter traffic in Egypt tell us anything about changes in unemployment and poverty levels?





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Eyes Everywhere

Drone data helped focus emergency response after an earthquake on 25 Apr 2015 in Nepal

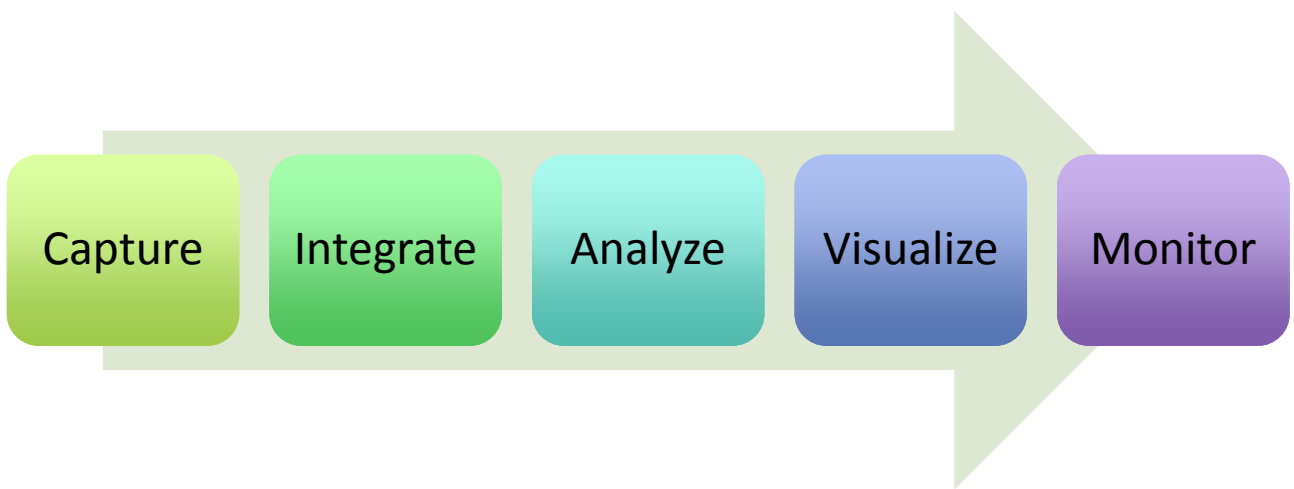
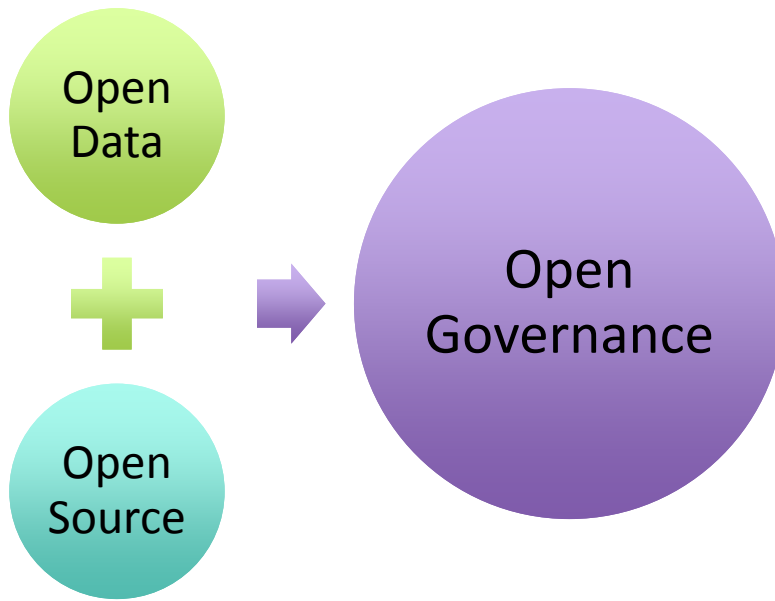


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OPEN DATA OPEN SOURCE

Non-Open DATA

- Making data available for a charge.
- Only registered members or customers can have access to data.
- Use of a proprietary or closed technology or encryption
- Copyright and patent forbidding (or obfuscating) re-use of the data.
- Restriction of robots to websites.
- Aggregating factual data into "databases" which may be covered by "database rights" or "database directives" (e.g. Directive on the legal protection of databases).
- Time-limited access to resources.
- "webstables", or the provision of single data points as opposed to tabular queries or bulk downloads of data sets.
- Political, commercial or legal pressure on the activity of organisations providing Open Data.



- SDG Indicator Framework
- SDMX Standard for Data and Metadata Exchange
- Manage Disaggregated, Subnational Data
- Target Vulnerable with Human Rights Approach

1 Learners' Centered

6 Human Rights

2 Sector-wide Approach

7 Visualization

3 No one left behind

8 Real-Time

4 National to Local

9 Big Data

5 Standards

10 Open data/Open source

**10 EMERGING DATA TRENDS
TO SHAPE FUTURE EDUCATION**

Credits:

- Extracts from the input made by Mr Kris Oswalt - President CFS Foundation during the session on M&E of Education, UNESCO International Symposium on Education Policies for 2030, UNESCO HQ Paris, 19 January 2016
- Ichiro Miyazawa, Programme Specialist, UNESCO Bangkok
- Han, Lingxin
- Serrano, Amalia Miranda