COMMUNICATING STATISTICS
AT THE TIME OF DATA REVOLUTION

Communicating Statistics at the Time of Data Revolution

Data Revolution

- Fast growing demand for data
- Fast growing data availability
- Ease of access
- Development of ICTs

  - Users are more concerned about getting data than about their quality
  - Competition for official statistics grows fast
  - Official statistics adapts slowly
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Reliability of various information sources

“Community sharing”
- Unverified
- “Leading view” bias
- Lack of stability
- Lack of focus

“Authoritative authorship”
- Concept and structure
- Consistent sources of facts
- Known authors (qualifications)
- Stable and focused
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**Attempted statistical data communities**

- Swivel
- VisualData
- Google Public Data Explorer Labs
- Common Crawl
- Wikidata
- Freebase

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**Big Data**

- Abundance of data available in the cyberspace
- Successes vs. failures
- Big data are older than they appear
- Opportunities:
  - costs efficient,
  - lessen burden….
- Challenges:
  - representativeness, coverage, quality, accessibility,…
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Looking back to values of Official Statistics

- Thousands of years of accumulated experience and wisdom
- Methods and techniques based on a solid scientific basis
- Relevant to policy issues, addressing national development
- Impartial – ethical principles
  - ISI Declaration of Professional Ethics
  - Fundamental Principles of Official Statistics
- Public service – public good
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Data Revolution – statistics for public use

Liberty: Access to data should be open without restrictions

Equality: Data must be released simultaneously to all users

Fraternity: Data are a public good, and have to be shared among all actors in statistics
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Adjusting to user needs – multiple channels
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Aggregate data – on-line databases

- Easy to use portal
- **Structure** (SDMX Statistical Domains Classification)
- User driven data manipulation (pivoting, aggregates…)
- Downloadable formats
- “Mobile” version
- Customizable alerts
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Key indicators – fast and easy access

• Key indicators on home pages
• Pre-arranged database tables
• Dashboard
• Apps for smartphones
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Highlights – tell the story behind data

• Addressing laymen (media, private individuals, …)

• Single topic, only few data items/series

• Simple language

• Simple graph

The Fund for Peace's Fragile States Index (FSI) attempts to identify troubled states by assessing, among other indicators, the distribution of economic development, rates of poverty, unemployment, and incarceration; and the provision of services like health care and education.

Fragile State

Black America

Infographic created by Theodore R. Johnson and KeNisa Williams

Evaluated on some FSI metrics, BLACK AMERICA RESEMBLES A FRAGILE STATE

UNEMPLOYMENT

BLACK AMERICA WOULD BE ONE OF THE WORST 30 NATIONS HIGHER THAN MANY STATES ON THE FSI HIGH ALERT LIST

POVERTY

BLACK AMERICA HAS A HIGHER RATE OF POVERTY THAN WAR-TORN IRAQ.

Definitions of poverty vary greatly by nation. Poverty in affluent nations is a much higher standard of living than poverty in resilient ones.


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**Visualisation**

- A good image can tell more than thousand words
- Dynamic graphs
- Customizable graphs
- Maps and cartograms
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Access to protected microdata

- Valuable resource for researchers
- Analysis beyond the limit of the usual production
- Public Use Files
- Safe Access
BETTER DATA – BETTER LIVES

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