## UNIVERSITY OF TWENTE.





United Nations Office Nairobi, Kenya, April 1-3, 2019

Yola Georgiadou



### **National Statistics**

- Nation-state scale
- All residents in households
- Pre-cooked categories for people
- Often public, open, revealed
- Create a shared truth, upon which consensus-forming claims can be made in decision making

## **Big Data Analytics**

- Any spatial scale
- Anybody, anywhere
- Emergent categories for people
- Often private, closed, secret
- Detect trends, sense moods,
  spot things as they bubble up ->
  create various truths

### **National Statistics**

- Simplify society
- Ostensibly public interest
- Diffuse controversy
- First ask a question, then collect related data
- NS officers are public servants, accountable to government
- Slow, high cost

## **Big Data Analytics**

- Complexify society
- Often not clear to whose interest
- Often amplify controversy
- First hoover any data, then ask as many questions as you want
- Data analytics experts often accountable only to CEOs
- Fast, low cost

#### **National Statistics**

• slow, high cost

#### Worst case scenario

 Disasters and humanitarian crises in weak states

## Consequence

- Hollowing out of the state
- Privacy violations

## **Big Data Analytics**

• Fast, low cost

# 22 March 2019

# FEMA's major privacy "incident" - The New York Times

FEMA publicly acknowledged that it shared personal data from 2.3 million disaster survivors with a contractor.

FEMA violated the Privacy Act of 1974 and Department of Homeland Security policy

FEMA exposed survivors to identity theft.



# FEMA shared with the contractor

# **Necessary data:**

First, Middle Last Name

Date of Birth

Last 4 digits of Applicant's Social Security Number

**Disaster Number** 

**Authorization for TSA** 

Number of Occupants in Applicants Household

Eligibility Start and End Date

Global Name

**Export Sequence Number** 

FEMA Registration Number

# 20 unnecessary data, including six with sensitive information:

**Applicant Street Address** 

Applicant City Name

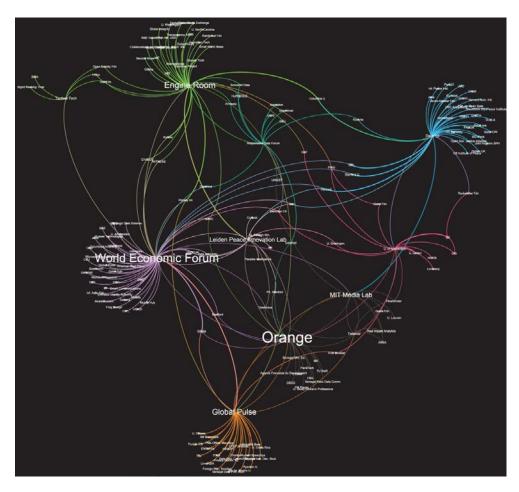
Applicant Zip Code

Applicant's Financial Institution Name

Applicant's Electronic Funds Transfer Number

Applicant's Bank Transit Number

# Global Responsible data actors



Taylor, Linnet. 2016. The ethics of big data as a public good: which public? Whose good?, Philosophical Trans. Royal Soc. A. Vol 374, Issue 2083

#### **National Statistics**

• slow, high cost

## **Recommendation 1**

 Strengthen scientific method in national mapping & statistics organisations

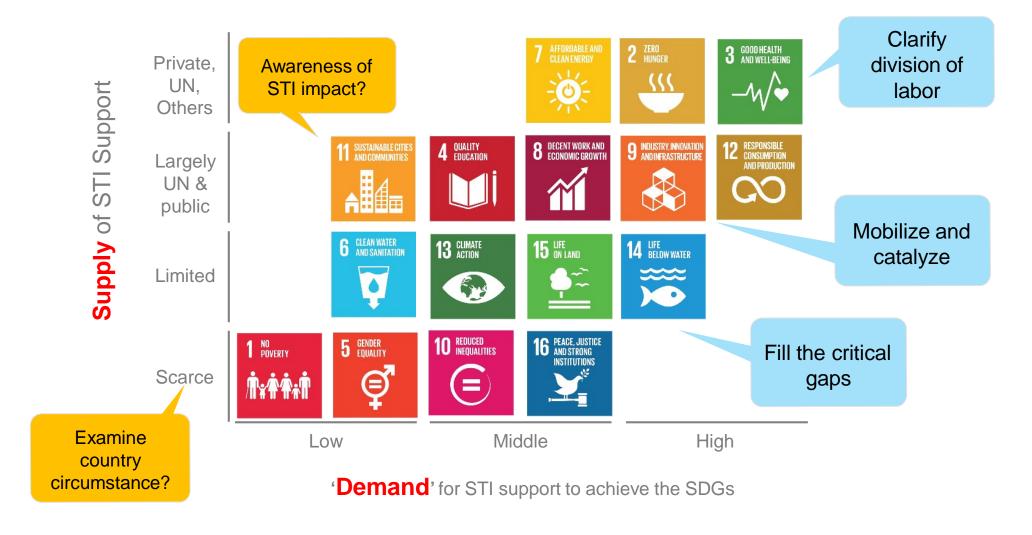
#### **Recommendation 2**

 Harmonise responsible data guidelines with national data protection laws & privacy cultures

## **Big Data Analytics**

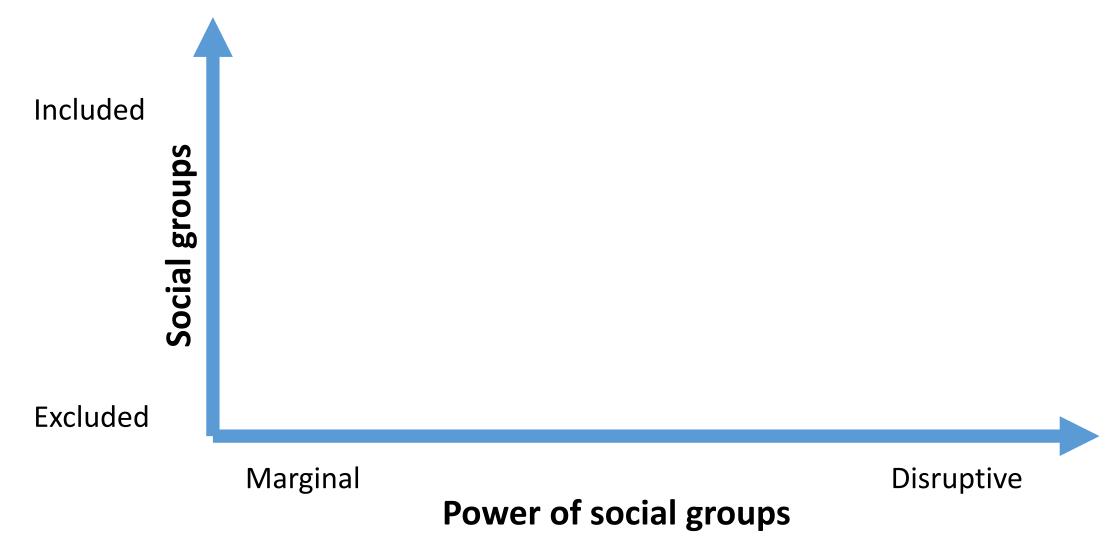
• Fast, low cost

# STI and SDGs: An Economics lens

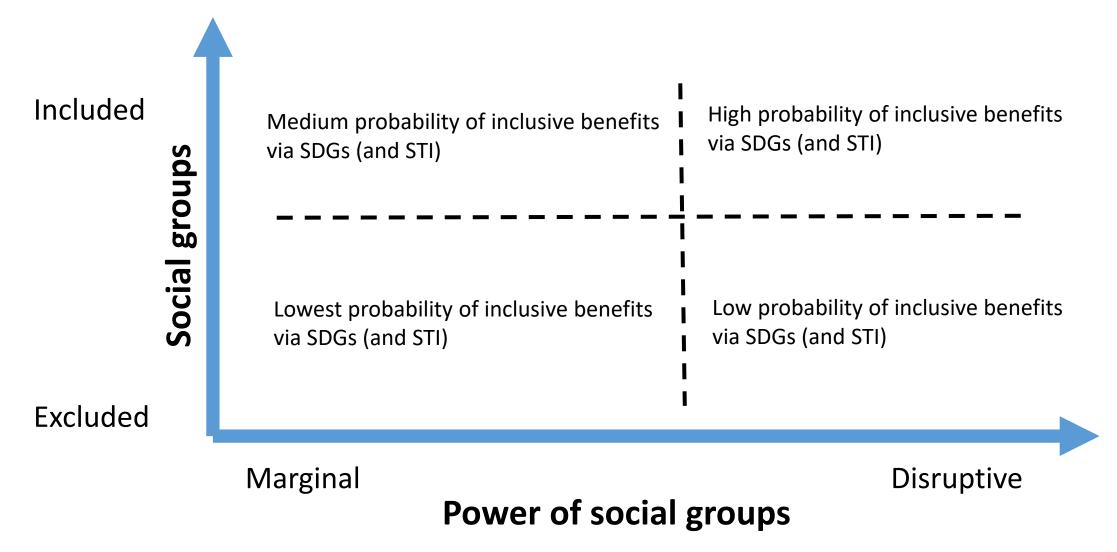


Source: Klaus Tilmes & Naoto Kanehira, World Bank Group 2017

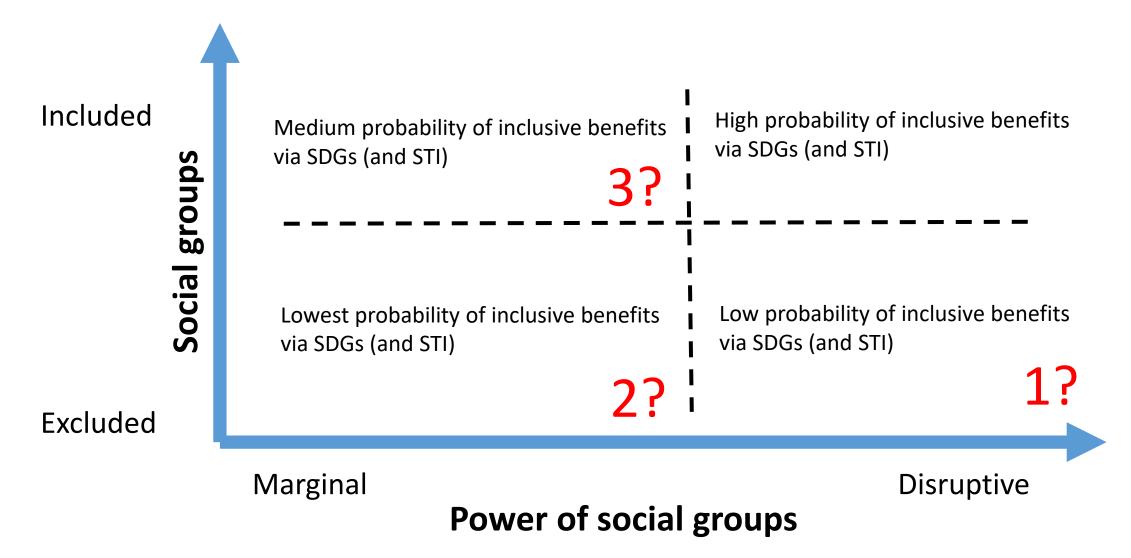
# STI and SDGs: A Politics lens



# STI and SDGs: A Politics lens



# STI and SDGs: A Politics lens – Which priorities?



# Recommendations for the STI for SDGs Road Map for Africa

#### Recommendations

- Strengthen scientific method in national mapping & statistics organisations
- Harmonise global responsible data guidelines with national data protection laws & privacy cultures
- Use both an economics and a politics lens to prioritize (and distribute labor for providing) assistance to nation-states aspiring to STI for SDGs