Africa Webinar,2022

BIG DATA AND OFFICIAL STATISTICS IN AFRICA

MAXIMIZING THE OPPORTUNITIES

.

Osuolale Peter Popoola, PhD
Mathematics and Statistics Department
Adeseun Ogundoyin Polytechnic, Eruwa
Oyo State, Nigeria

Introduction

One of the Characteristics of the 3rd Industrial revolution is the internet of things.

Like many new information technologies, big data can bring about dramatic cost reductions, substantial Improvements in obtaining official statistics by the NSOs in Africa

.

Before this era, official data are generated largely from sample survey, censuses and administrative methods

Big data burst upon the scene in the first decade of the 21st century.

From the dawn of civilization until 2013, humankind generated 5 Exabyte's of data. Now the world is producing 5 Exabyte's of data every two days...and the pace is accelerating.

Big data comes from everywhere

Osuolale Peter Popoola, PhD
Mathematics and Statistics Department
Adeseun Ogundoyin Polytechnic, Eruwa
Oyo State, Nigeria

IAOS

ISI

Human-sourced data → Social Networks (Facebook, Twitter, LinkedIn,) Blogs and posted comments, Pictures , Videos (Youtube, …) Search engine queries. Mobile data content (text messages, …)

E-Transaction data → Commercial transactions, Banking/stock prices records, E-commerce, Telephone Call Detail Records, Credit cards, Medical records from Public Health

Machine generated data → Sensor data eg. Weather/pollution sensors, Traffic sensors/webcam, Security/surveillance,videos/images.Tracking devices e.g GPS systems, Mobile phone location, Satellite images

Popoola, Osuolale Peter, PhD
Mathematics and Statistics Department
Adeseun Ogundoyin Polytechnic, Eruwa
Oyo State, Nigeria

06/10/2022

In Africa most NSOs and Research Institutes are still facing the challenges of obtaining official statistics using traditional methods

A

In Asia and the Pacific Big data is at experimental stage

B

In Europe and Developed country Big data is been used to obtain official statistics. Agencies such as:

Eurostat, the European Statistical System (ESS), United Nations Economic Commission for Europe (UNECE), and UNSD have started incorporating big data in obtaining official statistics

C

Currently in Africa more than half of the SDGs indicators have no or insufficient data for its monitoring

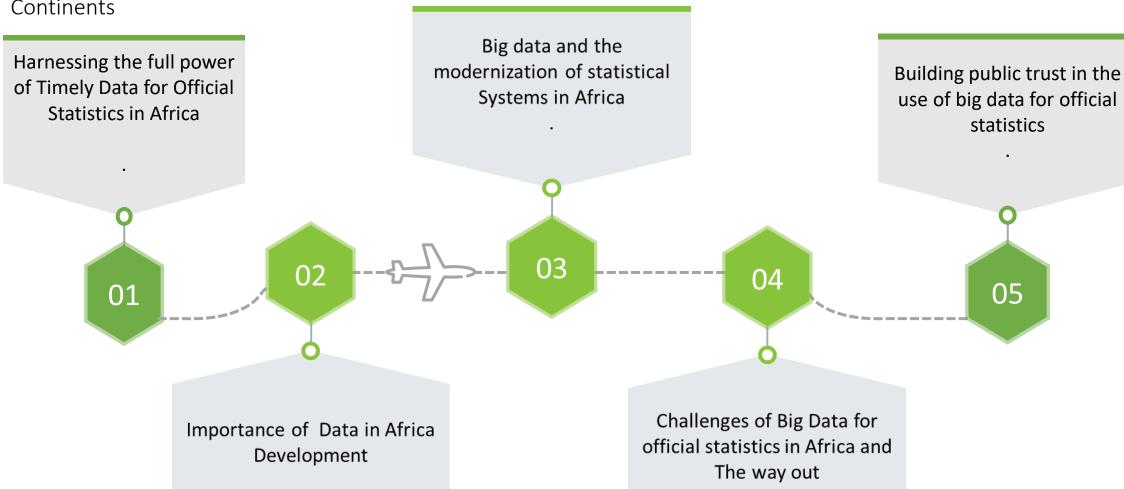● **For Africa development** NSOs and research institutes need to incorporate big data in obtaining OS

D

Popoola, Osuolale Peter, PhD
Mathematics and Statistics Department
Adeseun Ogundoyin Polytechnic, Eruwa
Oyo State, Nigeria

Five speakers, Four Continents

Harnessing the full power of Timely Data for Official Statistics in Africa
.

Big data and the modernization of statistical Systems in Africa
.

Building public trust in the use of big data for official statistics
.

01

02

03

04

05

Importance of Data in Africa Development

Challenges of Big Data for official statistics in Africa and The way out

Popoola, Osuolale Peter, PhD
Mathematics and Statistics Department
Adeseun Ogundoyin Polytechnic, Eruwa
Oyo State, Nigeria