VISUALIZING OFFICIAL STATISTICS USING MICROSOFT POWER BI

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I. INTRODUCTION

Official Statistics are statistics produced and disseminated by government agencies or international organizations.

Official statistics result from the collection and processing of data with due consideration of statistical standards which make them fit for purpose or of quality.

However, dissemination of official statistics, specially visualization of official statistics, is not given the same importance as with other statistical processes.
WHY DO WE NEED DATA VISUALIZATION?

- One of natural instincts of humans is to see and understand pictures

- Understanding numerical data takes years of training from schools and even so, a lot of people are still not good with numerical data

- It is much easier to find trends and relations from a well-drawn picture since data visualization shifts the load from numerical reasoning to visual reasoning
I. INTRODUCTION

STATIC VISUALIZATION

- commonly seen as infographics posted on the website or printed handouts
- focused on a specific data story
- data story is captured in an engaging single page layout

Infographics
II. VISUALIZATION

INTERACTIVE VISUALIZATION

➢ focused on graphic visualization and improving the way users can access and interact with information

➢ allow users to be part of the data visualization process by building a story of their choosing

➢ commonly seen as interactive dashboards for quick and easy way to understand insights based on changing data
II. VISUALIZATION

INTERACTIVE VISUALIZATION

➢ grant users the ability to explore, manipulate, and interact with data by employing dynamic charts, changing colors and shapes based on queries or interactions

➢ offer better access to real-time data which is valuable for a variety of organizations

➢ can diversify the way we display the data
III. POWER BI

MICROSOFT POWER BI

A cloud-based business intelligence tool that let us visualize our data, share insights across our organization, and bring our data to life with live dashboards and reports.
III. POWER BI

QUICK OVERVIEW OF COMPONENTS OF POWER BI

**Power Query** is a data transformation and mash up tool

- can extract data from different data sources and databases
- can use online search or use web address to fetch the data from web page
III. POWER BI

QUICK OVERVIEW OF COMPONENTS OF POWER BI

**Power Pivot** is a in-memory tabular data modelling tool

- can build star schema, calculate measures and columns, build relationships through entities, etc.
III. POWER BI

QUICK OVERVIEW OF COMPONENTS OF POWER BI

Power View is an interactive data visualization that can connect to data sources and fetch the metadata to be used for data analysis.
III. POWER BI

QUICK OVERVIEW OF COMPONENTS OF POWER BI

**Power Map** is for visualizing geospatial information in 3D mode

- It gives another dimension to visualization
- can measure as height of a column in 3D or in heatmap view
III. POWER BI

- Edit Queries
- Report
- Data/Tables
- Model/Relationship
- Publish
- Page
- Visualizations
- Fields
III. POWER BI

POWER BI SAMPLE OUTPUT

   http://tiny.cc/powerbiGRDPVisualization

   https://tinyurl.com/PovertyIncidence

3. Consumer Price Index, January 2012 – August 2019
   http://tiny.cc/cpisample
Thank You!

http://www.psa.gov.ph

/PhilStatAuthority

@PSAgovph
9 Reasons why Power BI is the Best Tool for Data Analysis
By Edwin Lisowski

How much of our country will we lose to political dynasties in 2016?
Source: rappler.com

Move Beyond Excel, PowerPoint And Static Business Reporting with Powerful Interactive Dashboards
By Sandra Durcevic
https://www.datapine.com/blog/interactive-dashboard-features/

Drag and Drop Visuals in your Interactive Dashboard – Gridster & D3.js
The Tech Blog

Query and Power BI – Navigating to rows, columns and cells
By Miguel Escobar
Graphic Interchange Format Sources:

Power BI Course
MyOnlneTrainingHub  https://www.myonlinetraininghub.com/power-bi-course

Excel 3D Maps
MyOnlneTrainingHub  https://www.myonlinetraininghub.com/excel-3d-maps