

Data Analysis

Levels and Types of Analysis



• Simplest; present facts; summarization

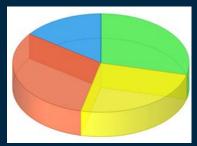


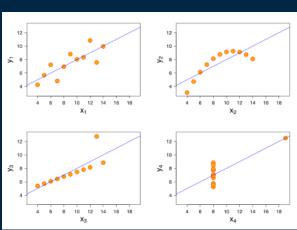
- Measures of central tendency (Mean, Median, Mode)
- Measures of dispersion (Range, Standard deviation)
- Measures of association
- Modelling, Projection and Forecasting
- **Spatial**

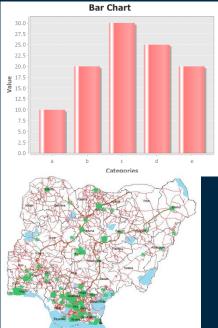
Types:

- Table
- Line Chart
- Bar Charts
- Pie Charts
- Histograms
- Scatter plots
- Maps
- Analytics
- etc

Age Bin	F	М
(20,30]	900	600
(30,40]	300	100
(40,50]	600	900
(50,60]	500	1200









Some Software for Data Analysis

There are many Statistical Analysis Packages available today,

From simple to complex and robust analysis

SPSS, SAS, STATA, R, MATLAB, MiniTab, Statgpahics, E-view, Shazam, MS Excel etc.

ArcGIS, Geomedia, etc for Raster and Spatial Data Analysis



Technology and Data Analytics

Categories

- Descriptive Analytics Insights into the past
 - ✓ What has happened?
- Predictive Analytics Insights into the future
 - ✓ What could happen?
- Prescriptive Analytics Advice on possible outcomes.
 - \checkmark What should we do?
- Diagnostic Analytics Root cause of events
 - ✓ Why did it happen?



