

B. COLLECTION OF INFORMATION EMPLOYING STATISTICAL METHODS

Statistical analysis refers to a variety of methods used to collect data, describe data, explore and understand new patterns and relationships in data, test hypotheses, make inferences about a population, and predict future behavior based on sample datasets.

Illustrative Scenario

Process data collected.

Use Case

Using tools, TTP collaborates with HFPP partners to: quickly explore data sets, identify missing or anomalous data, prepare data for analysis, and produce statistically significant findings that are relevant to business needs.

Technical Aspects

Design of experiments

Forecasting, regression analysis, and time series analysis

Factor analysis, principal component analysis, and structural equations modeling

Classification, discriminate analysis, and clustering

Sensitivity/uncertainty Analysis

Common methods include time series analysis, regression and ANOVA providing a mathematical representation for exploration and prediction, sampling methods, and hypothesis testing.

Example Tools

SAS, R, SPSS, Strata