

How to collect high – quality data?

- Implements a data collection plan
- Set data quality standards
- Create a plan for data correction
- Plan for data integration and distribution across departments
- Set goals for ongoing data collection

Data integrity

 Data integrity refers to the accuracy and consistency (validity) of data over its lifecycle.

Five issues

- Uniformity
- Version
- Completeness check
- Conformity check
- Genealogy check or drill down

missing data or incomplete data

- Missing data is defined as the data value that is not stored for a variable in the observation of interest.
- The problem of missing data is relatively common in almost all research and can have a significant effect on the conclusions that can be drawn form the data

Types of missing data Missing completely at random (MCAR) Missing at random(MAR) missing not at random(MNAR) 0010000011014 111001101010 001001101000110

Techniques of handling missing data

- List wise or case deletion
- Pair wise deletion
 - Mean substitution
 - Regression imputation
- Last observation carried forward

Techniques of handling missing data Maximum likelihood **Expectation** –maximization Multiple imputation Sensitivity analysis

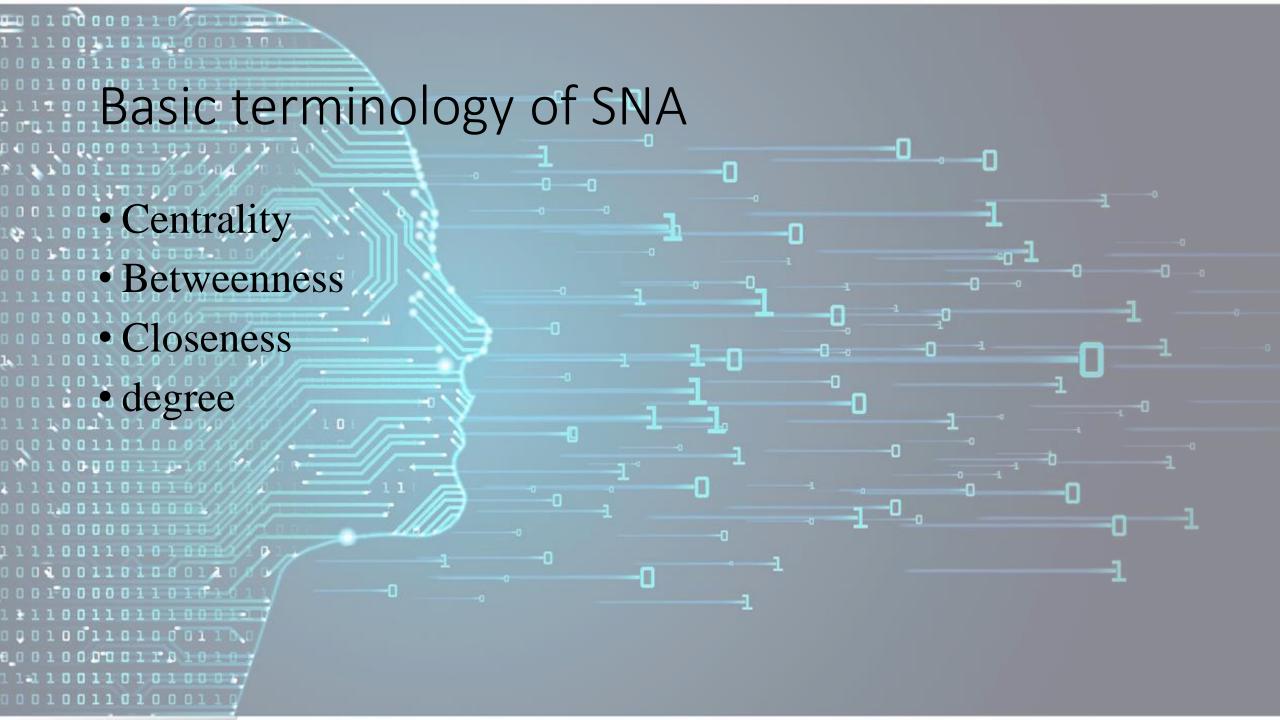
Social networking analysis

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Analyzing various characteristics of the pattern of distribution of relationship and drawing inferences about the network as a whole or about the belonging to it considered individually or in groups.



General application of SNA

- For improved customer targeting, for potential promotions based on their past purchase history
- Identifying loyal customers who are vocal, active and passionate and can be characterized as brand ambassadors
- In fighting terrorist activities by characterizing the network organizations
- In detecting health care fraud by detecting patterns

Business application of SNA

- Social network analysis for creating usable customer intelligence
- Social network analysis in organisational change
- For understanding health behavior