# ANALYSIS PRINCIPLES



Over the past two decades, a large no. of Analysis modeling methods have been developed.

By Analysing problems and their Causes, investigators have developed a variety of

- Notations and
- Corresponding Sets of Heuristics to overcome them.



Each analysis method has a unique point of view; However all analysis methods are related by a set of operational principles:

1. The information domain of a problem must be represented and understood.
2. The functions that the software is to perform must be defined.
3. The behavior of the Software must be Represented.
4. The Models that depict information, and behavior must be Partitioned in a manner that uncovers detail in a layered (or Hierarchical) fashion.

5.) The **Analysis process** should move from essential information towards **Implementation Detail**.

By applying these principles, an Analyst Approaches a problem **Systematically**.

## A set of guiding principles for Requirement Engineering:

- **Understand** the problem before you begin to create the analysis model.
- **Develop Prototype** that enable a user to understand how human/machine interaction will occur.
- **Record** the origin of and Reason for every Requirement.
- **Use multiple views of Requirements:** Building data, functional and behavioral models provide the SE with different 3 views.
- **Rank Requirements:** Tight deadlines may preclude the implementation of every Software Requirement. If an incremental process model is applied, those requirements to be delievered in the first increment must be identified.
- **Work to eliminate Ambiguity :-** As most of requirements are described in a natural language, the opportunity for ambiguity abounds. The use of formal technical reviews is one way to uncover and eliminate ambiguity.