

# Information Systems Development

**System owners & system users initiate most Information Systems Development projects**

**An undesirable situation or problem/s in the organisation which hinders their progress or achieving the desired goals may be one reason to develop a new system**

**It could also be that a new opportunity has been identified which would bring more benefits to the organisation**

# **Information Systems Development.....**

**A new requirement that may be imposed on  
the organisation by directives issued by  
Government/Management/some other External  
Influence**

# **Scope Definition**

**This is the first stage/phase of an Information Systems Development project**

**The purpose of the scope definition is twofold.**

- 1. Is this problem/opportunity/directive worth looking at?**
- 2. If the above is worthwhile doing then identifying the size and boundaries of the project, the project vision, any constraints, the participants, budget & the schedule**

# Scope Definition

**Scope definition should include:**

**1. The scope of the project which may later change during the development life cycle(Scope is the boundaries of a project – the areas of a business that a project may or may not address)**

**Project scope can be easily defined using:**

**➤ *What type of data: e.g. For a sales Information System – customer data, product data etc.***

- ***What are the business processes in the system(customer management, order entry, order fulfillment) etc.***
- ***What are the System interface with users, locations & other systems (e.g. Customers, Sales reps, Regional sales offices, Accounts receivable etc.)***
- ***Perceived problems (as perceived mostly by system users)***
- ***Opportunities (which would bring more benefits to the organization)***

➤ ***Directives that triggered the project***  
**(Government regulations or mergers)**

**2. Project worthiness (Is this project worth doing? Feasibility studies)**

**3. Schedule & budget**

**4. Constraints – budget limits, deadlines, availability of human resources etc.**

**5. Communication of the project plan or project proposal (Communication skills of presenters are very important)**

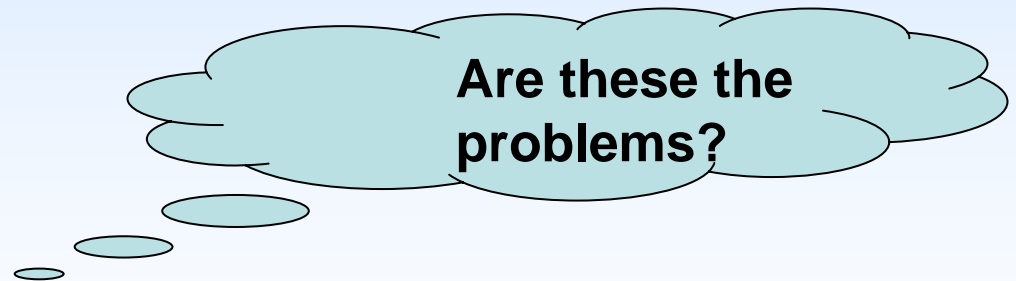
**At this stage it is not necessary to spend a lot of time preparing this document and modeling or prototyping may not be required.**

**Refer to the Sample Problem Statement**

**Fig. 5 – 8 in Ref 1 p171.**

# Finding Problems to Solve

- Requirements solve problems
  - E.g. A mother takes her young daughter to the doctor because the child is ill. The first thing the doctor tries to do is, identify the problem.
- The child has
  - an earache,
  - a fever,
  - a runny nose.





# Finding Problems to Solve

- E.g. Cont...
  - The mother has been giving the child pain medicine to ease the pain,
  - But still the child is not well.
  - The mother is treating
    - the symptoms and
    - **NOT** the real problem.
  - However, the doctor,
    - analyze the symptoms further
    - examine the child
    - Make the conclusion

**Conclusion (Root  
cause of the child's  
symptoms) :  
AN EAR  
INFECTION**

# Finding Problems to Solve

- E.g. Cont...
  - Problem is identified and analyzed,
  - Recommend a cure (solution)
    - An antibiotic can be prescribed
    - Determine constraints on the medicine that can prescribe.
      - How old is the child?
      - How much does she weigh?
      - Is the child allergic to any medications?
      - Can she swallow pills?
    - Once the constraints are known, a prescription can be generated.
- Systems analysts use the same problem-solving process as a doctor uses, but instead of diagnosing medical problems they diagnose system problems.