

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)

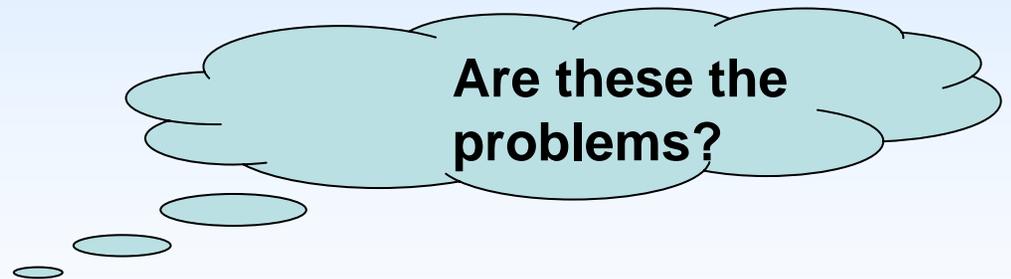
At this stage it is not necessary to spend a lot of time preparing this document and modeling or prototyping may not be required.

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.