Implementation of Information Systems

Successful implementation

What are the criteria for judging the success of a system? Here are some possible measures:

- **High level of use**
  - Is the new system actually used?
- **High level of user satisfaction**
  - Do users like the system?
- **Accomplishment of original objectives**
  - Have they been satisfactorily achieved?
- **Appropriate nature of use**
  - Do users really know how to use it?
- **Institutionalisation of the system**
  - A successful system will be taken on board enthusiastically by users and used in new and changing ways, evolving to meet new demands

Why do information systems fail?

Information systems fail for many reasons at any stage of the systems life cycle.

- ◆ **Analysis**
- ◆ **Design**
- ◆ **Programming**
- ◆ **Testing**
- ◆ **Conversion**

Analysis weaknesses

- ◆ **Not enough time and money**
- ◆ **Poorly-defined objectives**
- ◆ **Inadequate staffing**
- ◆ **Insufficient user involvement**
- ◆ **Poor analytical skills**

Design weaknesses

- **Insufficient user involvement**
- **Lack of flexibility in design – no scope for development**
- **Inappropriate management involvement**
  - **Could be too much or too little**
- **Insufficient regard paid to necessary impact of clerical changes on staffing or the organisation**

Programming weaknesses

- ♦ **Development time underestimated**
- ♦ **Inadequate skills – not enough attention to design**
- ♦ **Lack of documentation**
- ♦ **Inadequate resources – e.g. computer time**

Testing

- **No proper test plan**
- **Insufficient user involvement**
- **No acceptance tests or formalised sign-off procedures**

Conversion

- Not enough attention paid to converting data to new system
- Inadequate training for users
- Inadequate user documentation
- No performance evaluations

Factors in successful implementation

◆ **User involvement, motivation and training**

   – **Users are involved right from the start of a project**

◆ **Level of complexity and risk**

   – **The larger the project, the greater the risk**

◆ **Proper management of system development**
A project that is not properly managed is likely to suffer from:

   – **Cost overruns**

   – **Delays in completion**

   – **Technical problems resulting in poor performance**

   – **Failure to achieve expected benefits**

◆ **Management support**

   – **New systems that have the backing of management are more likely to succeed**
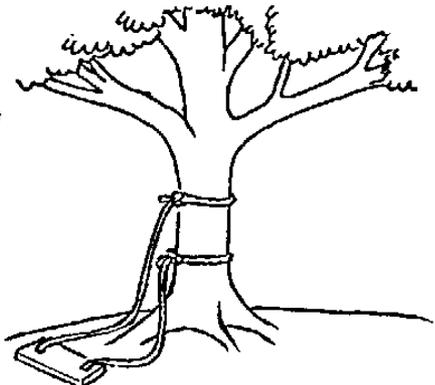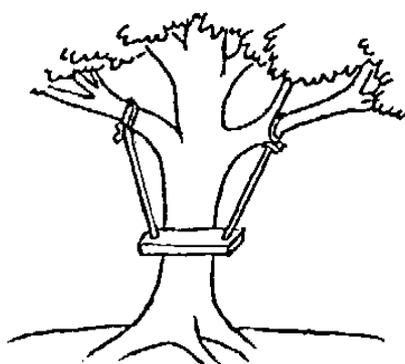
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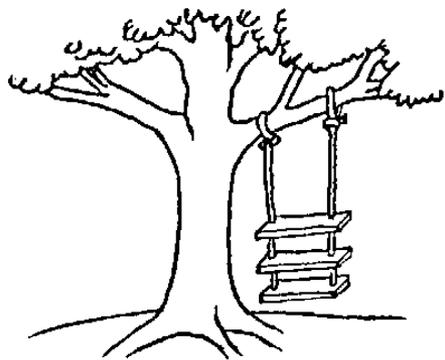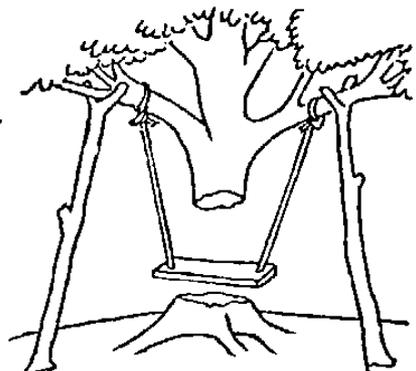

As proposed by the project sponsor
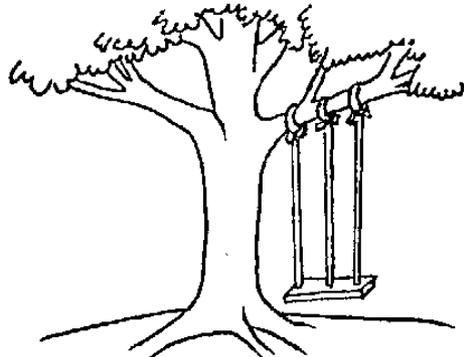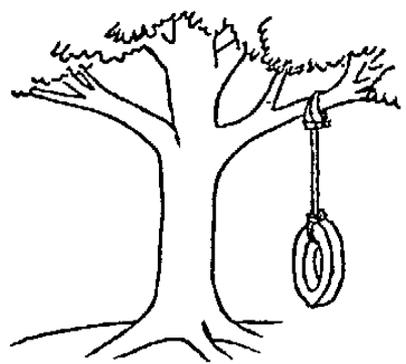
As specified in the project request

As designed by the senior analyst

As produced by the programmer

As installed at the user's site

What the user wanted