



# Development & Management IS

Kudang B. Seminar

1

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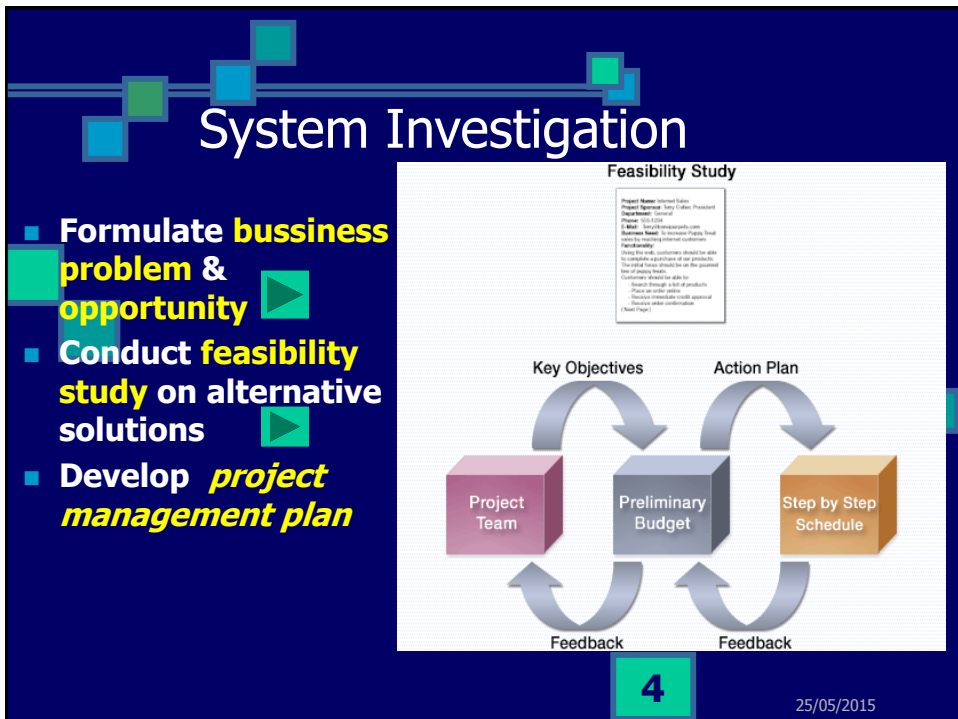
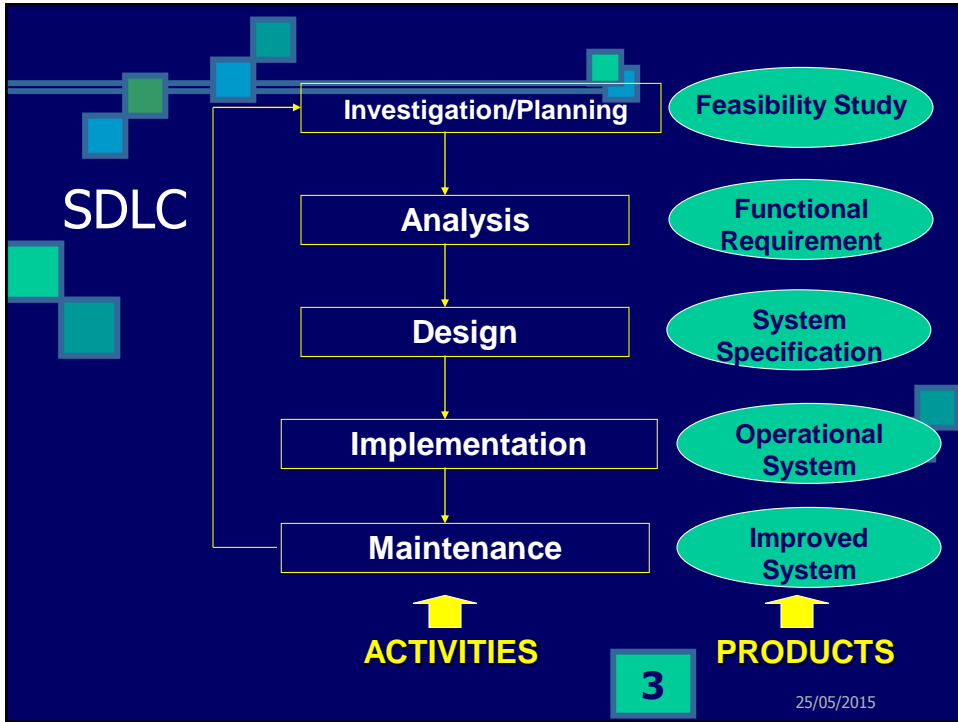


## Development Methods

- SDLC (System Development Life Cycle)
- Prototyping

2

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## System Investigation: Formulate problem & opportunity

- **Problem:** undesired conditions faced by users
- **Opportunity:** available solution alternatives



5

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## System Investigation: Feasibility Study

- **Organizational feasibility**
- **Economic feasibility**
- **Technical feasibility**
- **Operational feasibility**
- **Benefit Analysis: *tangible & intangible benefits***



6

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# System Analysis

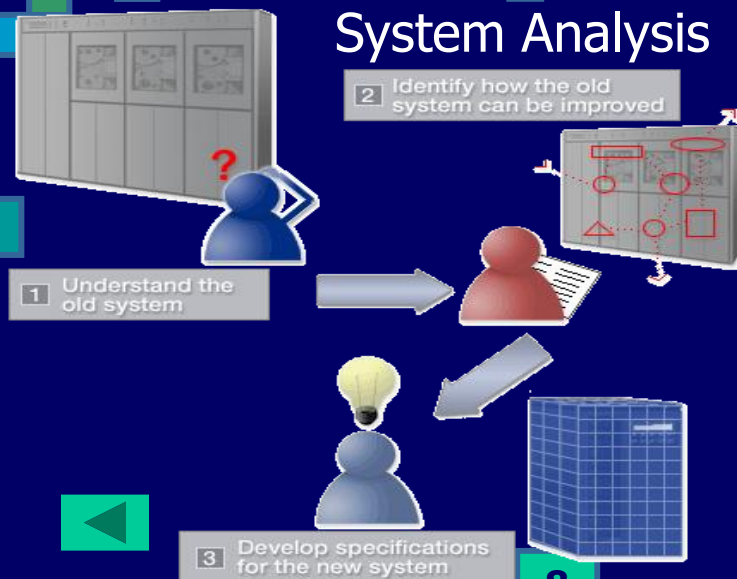
- Information required by *end users*
- Organizational environment: structure, geography, rules and policies
- Existing system
- Develop functional requirements expected by end users



7

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# System Analysis



8

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# System Design

- **Develop system specification: hardware, software, brainware, network, dataware**
- **Information design: content, form, & time**
- **Design user interface, style & input/output format & structure**
- **Process design: input - output transformation**
- **Security system**

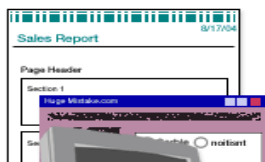


9

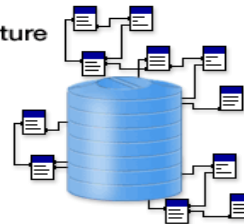
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# System Design

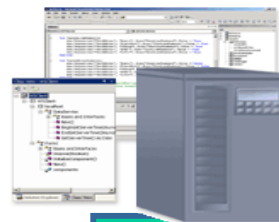
## User interface design



## Data structure design



## Program design



10

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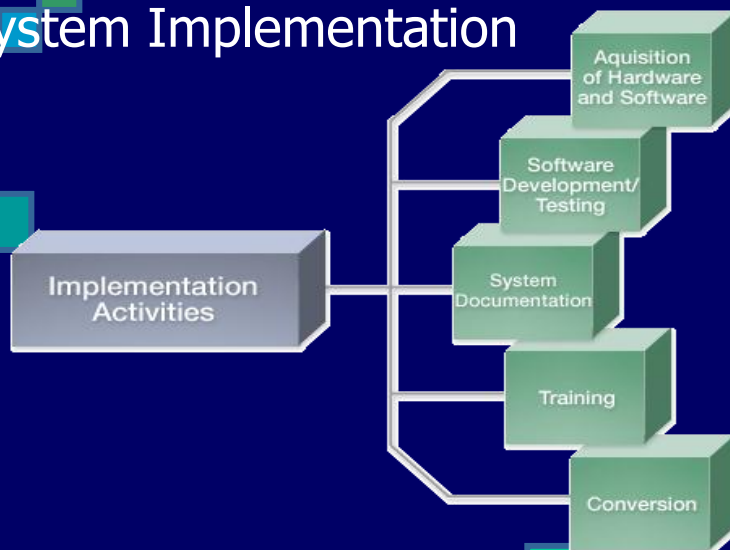
# System Implementation

- Procurement of hardware, software, brainware, netware, dataware
- Socialization of the new system
- Conversion from old to new system
- Testing

11

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# System Implementation



12

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## Methods of System Conversion

Old System

New System

*Parallel*

Old System

New System

*Pilot*

Old System

New System

*Phased*

Old System

New System

*Plunge*

13

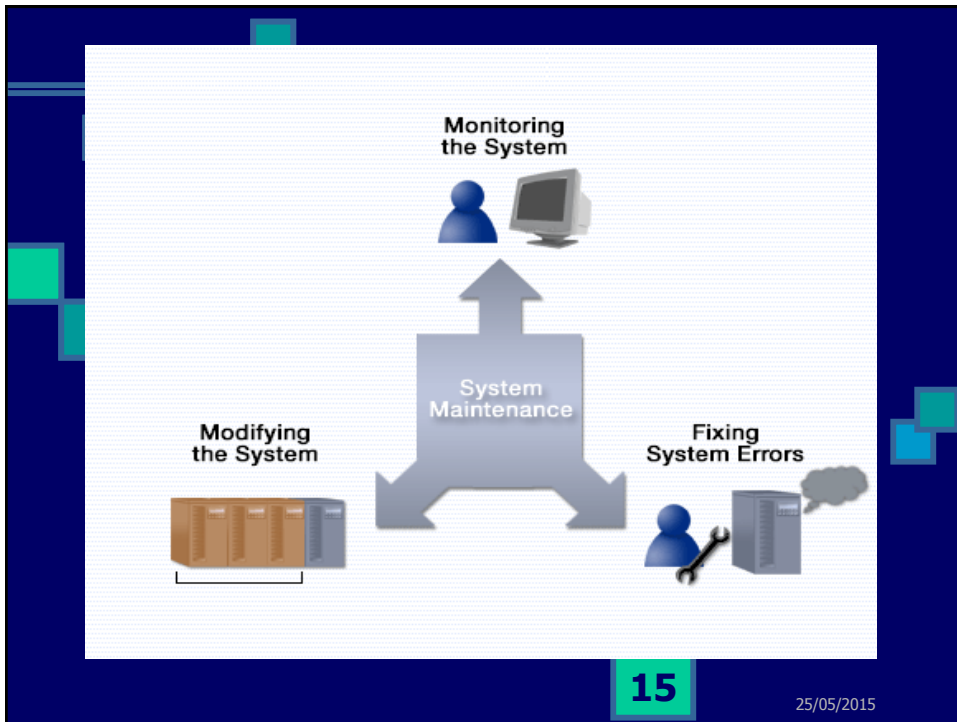
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## System Maintenance

- Periodical evaluation and inspection
- System Auditing
- System modification & revision in response to changing needs & conditions

14

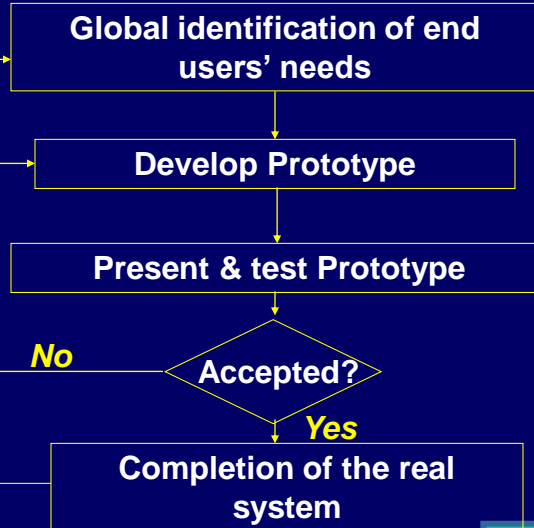
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- ## Prototyping
- Develop *working model* called *prototype*
  - Present the prototype to the end users, experts & observers to obtain feedback
  - Conduct the presentation interactively & periodically until achieving users' agreement.
- 16
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## Prototyping Steps



17

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## Project Management (PM)

- Team leader must have good PM skills
- Major reason for IS development failures-bad PM skills
- Only 26% of all projects surveyed (23,000) in 1998 succeeded
- 28% failed, 46% challenged
- Lower success rates for large companies
- Better PM skills needed

18

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## Skills for Project Managers

- Technology and business knowledge
- Judgment
- Negotiation
- Good communication
- Organization

19

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## Implementation Failures

- No user involvement
- No clear objectives stated early
- No real executive sponsorship

20

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