

## The Planning Process

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Health Care in 2020: Opportunities and Challenges  
before Public Health Hospitals and Pharmaceutical  
Sectors in India  
Indian Institute of Health Management Research  
Jaipur, 18-19 November 2006

## Project Stages

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- Definition
- Design
- Construction
- Commissioning
- Operation

## Basic Philosophy

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- Reflection** before **action**
- Analysis** before **synthesis**
- Diagnostic** before **treatment**
- Programming** before **planning & design**
- Treat the disease, not the symptoms
- Define and understand the problems before developing solutions

## Project Definition

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- Strategic Planning
- Programming
  - Master Program
  - Functional and Space Program
  - Data Sheets

## Strategic Planning

*"The process by which the guiding members of an organization envision its future and develop the necessary procedures to achieve that future"*

*"It helps an organization **create** its future"*

*Goodstein, Nolan and Pfeiffer*

## Strategic Planning

- Assess the internal environment
  - Strengths and weaknesses of the organization and barriers to success
- Assess the external environment
  - Markets and customers
  - Competitors
  - Market share
  - Regulatory constraints
- Identify priorities
- State vision, mission and objectives

## Programming

*" A process leading to the statement of an architectural problem and the requirements to be met in offering a solution" Webster*

*"Programming = problem seeking"*

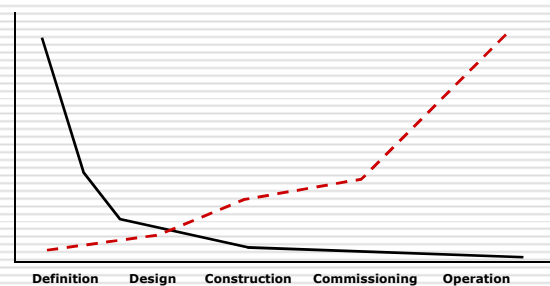
*"Design = problem solving"*

*"Programming = analysis"*

*"Design = synthesis" William Pena*

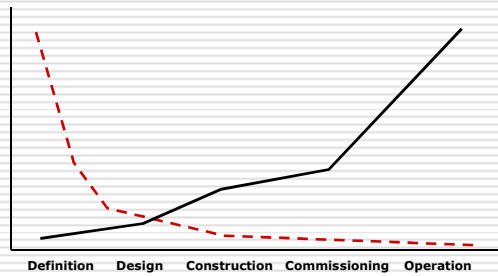
## Programming

Ability to Control Capital Cost versus Engaged Expenditures



## Programming

Usual Effort versus **Required Effort**



## Master Program

Definition

- Preliminary functional program that defines the project components and their areas based on workloads and general operating principles and systems, and provides an overall definition of the total project

## Master Program

Content – Summaries

- Clinical programs or product lines
- Operational systems
  - Pharmacy
  - Materiel handling
  - Food
  - Linen
  - Sterile supplies
  - IT
- Workloads
- Number of beds distributed by categories
- Summary of all major rooms (operating rooms, imaging, etc.)

## Master Program

Component Programs

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>□ Overview and assumptions</li> <li>□ Scope of Services;</li> <li>□ Major Policies and Procedures</li> <li>□ Workloads</li> <li>□ Staffing</li> <li>□ Inter-departmental relationships</li> <li>□ Gross Area</li> </ul> | <ul style="list-style-type: none"> <li>□ Major sectors                             <ul style="list-style-type: none"> <li>■ Inpatients Units</li> <li>■ Ambulatory Care</li> <li>■ Diagnostic and Therapeutic Services</li> <li>■ Administrative Services</li> <li>■ Support Services</li> <li>■ Patient and Public Services</li> <li>■ Staff Services</li> </ul> </li> </ul> |
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## Block Schematics

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- Based on the Master Program
- Developed by architects, engineers and other consultants
- Schematic drawings showing all components
- Site plan
- Outline specifications
- Validation of preliminary cost estimates

## Preliminary Report

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- General project description
- Master program
- Block schematics drawings
- Outline specifications
- Preliminary cost estimates
- Schedule and delivery method

## Functional Program Definition

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- Written document that describes the services offered, defines policies and procedures that will be implemented, and identifies all the resources necessary to deliver the services.
- It must contain all the information necessary to build and operate the facility

## Functional Program Objectives

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- For design professionals, it provides all the information necessary to design the building
- For the administration, it defines the project objectives and scope
- For the staff, it identifies policies and procedures to be implemented
- For financial planners, it defines human resources and operating cost.
- For the cost consultants, it provides all the information necessary to prepare realistic cost estimates
- For funding agencies, it establishes the capital resources necessary to bring the project to fruition

## Functional Program Contents

- Introduction
  - Overview
  - Description of program contents and definitions
  - Major operating concepts
  - Major operational systems
  - Main design principles
- Summaries
  - Workloads
  - Bed distribution
  - Net and gross areas
  - Total building area
  - Functional relationships

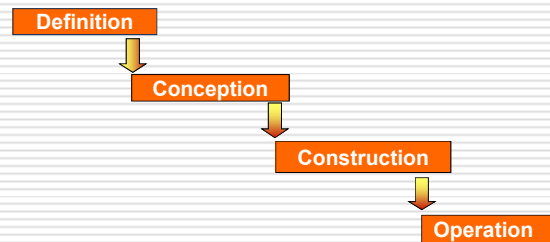
## Functional Program Contents

- Component programs
  - Basic hypotheses
  - Services offered
  - Policies and procedures
  - Workload
  - Staffing
  - Functional relationships
  - Design criteria
  - List of rooms with areas
  - Functional diagram

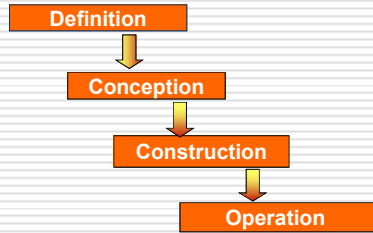
## Data Sheets Definition

- Detailed description of every room in the building with all its architectural and engineering requirements, and with a list of equipment and furniture
- Architectural characteristics such as finishes, doors, hardware, etc.
- Mechanical and electrical requirements regarding HVAC, medical gases, plumbing, lighting, outlets, etc.
- Information technology and telecommunication requirements
- Fixed and mobile equipment
- Furniture
- Diagrammatic layout

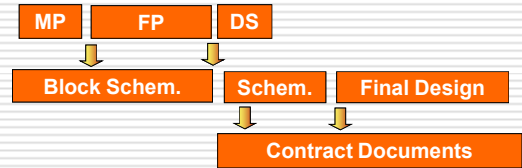
## Traditional Process



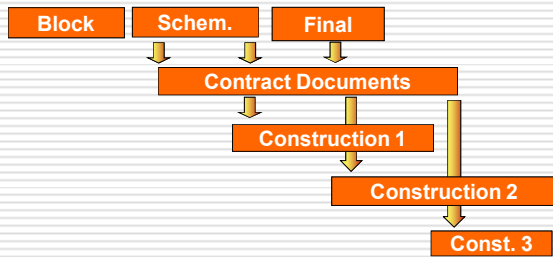
## Fast-track Process



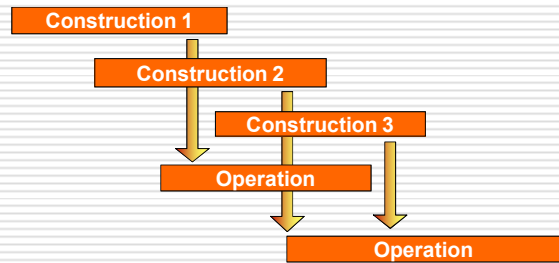
## Overlaps Programming/Design



## Overlaps Design/Construction



## Overlaps Construction/Operation



Thank you for your attention

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Questions?