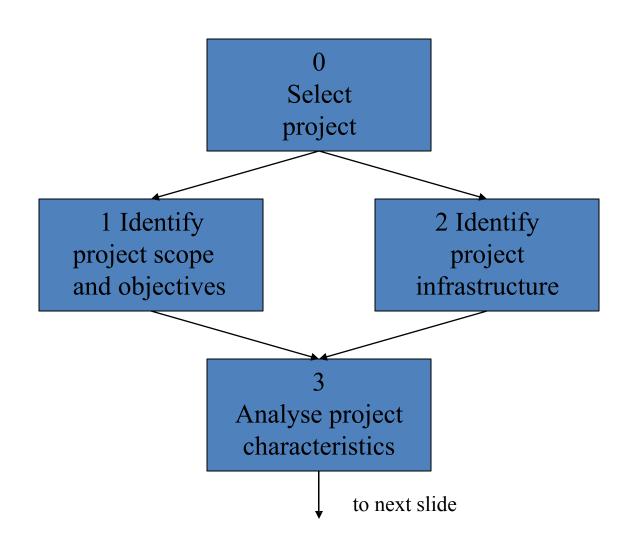
### Stepwise Project planning

#### Introduction

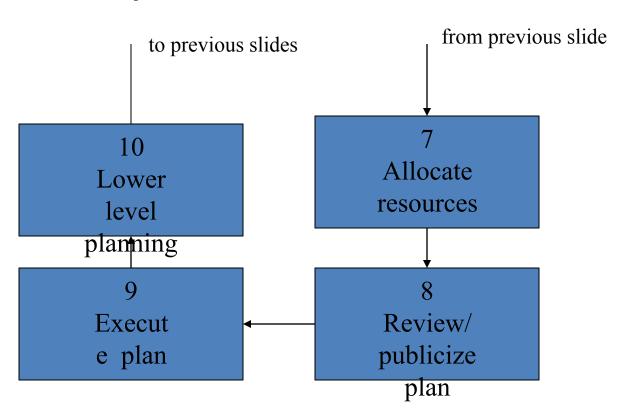


### Introduction(cont'd

from previous slide Identify the Revie products and activities W Estimate efforts Lowe for activity For each activity level detail identify activity to next slide

from next slide

# Introduction(cont'd )



### Introduction(cont'd

- Step 0: Select project
- Step 1: Identify project scope and objectives
- Step 2: Identify project infrastructure
- Step 3: Analyze project characteristics
- Step 4: Identify project products and activities

## Introduction (cont'd)

- (cont'd)
   Step 5: Estimate effort for each activity
- Step 6: Identify activity risks
- Step 7: Allocate resources
- Step 8: Review/publicize plan
- Step 9: Execute plan
- Step 10: Execute lower levels of planning

#### CASE STUDY 1

Amanda works for international office equipment (IOE) which manufactures and supplies various items of high technology office equipment. An expanding area of their work is the maintenance of IT equipment. They have now started to undertake maintenance of equipment for which they were not original suppliers. They use a computer based batch processing for invoicing on a job-by-job basis. An organization might have to call IOE out several times to deal with different bits of equipment and there is need to be able to group accounts for which monthly statements will be produced. Amanda has been given her first project management role, the task of implementing this extension to the invoicing system.

#### CASE STUDY 2

Brightmouth college is a higher education institution which is used to be managed by a local government authority but has now become autonomous. Its payroll is still administered by the local authority. The authority now charges the college for this service. The college management are of the opinion that it would be cheaper to buy an "off-the-shelf" payroll package and do the payroll processing themselves.

#### Step 0: SELECT THE PROJECT:

- Deciding whether the project can be taken up or not
- Technical, Organizational and Financial Feasibility is considered

### Step 1: Identify Project Scope and Objectives

- Step 1.1 Identify objectives and practical measures of the effectiveness in meeting those objectives
- Step 1.2 Establish a project authority
  - To ensure the unity of purpose among all persons concerned

## Step 1: Identify Project Scope Objectives (cont'd)

- Step 1.3 Identify all stakeholders in the project and their interests
- Step 1.4 Modify objectives in the light of stakeholder analysis
- Step 1.5 Establish methods of communication between all parties

### Step 2: Identify Project Infrastructure

- Step 2.1 Identify relationship between the project and strategic planning
  - To determine the order of related projects (in the organization) being carried out
  - To establish a framework within which the system fits
  - To ensure the hardware and software standards are followed

## CASE STUDY :Role of Existing Strategic Plan

Case Study Examples: Amanda finds at IOE that there is a well-defined rolling strategic plan that has Role of existing strategic identified her group accounts subsystem as an important required development, plans Because it is an extension of an existing system, the hardware and software platforms upon which the application are to run are dictated.

Brigette at <u>Brightmouth College</u> finds that there is an overall College strategic plan that describes new courses to be developed, and so on, and mentions in passing the need for 'appropriate administrative procedures' to be in place. In a short section in a consultant's report from an accountancy firm concerning the implications of financial autonomy, there is a recommendation that independent payroll processing be undertaken. Although the college has quite a lot of IT equipment for teaching purposes, there is no machine set aside for payroll processing and the intention is that the hardware to run the payroll will be acquired at the same time as the software.

## Step 2: Identify Project Infrastructure (cont'd)

- Step 2.2 Identify installation standards and procedures
  - more appropriate name: "Identify standards and procedures related to the software project"
- Step 2.3 Identify project team organization

### CASE STUDY: Identifying standards

Amanda at IOE finds that there is a very weighty manual of development Case Study Examples:

standards, which, among other things, specifies that SSADM will be the analysis Identifying standards and design method used. She finds that a separate document has been prepared, laying down quality procedures. This specifies when the reviews of work will be carried out and describes detailed procedures about how the reviews are to be done. Amanda also finds a set of <u>project management</u> guidelines modelled closely on PRINCE 2.

Brigette finds no documents of the nature that Amanda found at IOE except for some handouts for students that have been produced by different lecturers at different times and that seem to contradict each other.

As a stop-gap measure, Brigette writes a brief document, which states what the main stages of a 'project' (perhaps 'job for the user' would be a better term in this context) should be. This happens to be very similar to the list given in Chapter 1. She stresses that:

- no job of work to change a system or implement a new one is to be done without there being a detailed specification first;
- the users must agree to, or 'sign off', each specification in writing before the work is carried out.

She draws up a simple procedure for recording all changes to user requirements. Brigette, of course, has no organizational quality procedures, but she dictates that each person in the group (including herself) has to get someone else to check through his or her work at the end of a major task and that, before any new or amended software is handed over to the users, someone other than the original producer should test it. She sets up a simple system to record errors found in system testing and their resolution. She also creates a log file of reported user problems with operational systems.

Brigette does not worry about time sheets but arranges an informal meeting with her colleagues each Monday morning to discuss how things are going and also arranges to see the Vice-Principal, who is her official boss, and the heads of the finance and personnel sections each month to review progress in general terms.

#### CASE STUDY: Project Organization

At IOE, there are groups of systems analysts set up as teams that deal with Project organization individual user departments. Hence the users always know whom they should contact within the information systems department if they have a problem. Code developers, however, work in a 'pool' and are allocated to specific projects on an ad hoc basis.

At Brightmouth College, Brigette has seconded to her a software developer who has been acting as a technician supporting the computing courses in the college. She is also allowed to recruit a trainee analyst/programmer. She is not unduly worried about the organizational structure that is needed.

#### Step 3: Analyse Project

#### Characteristics

- Step 3.1 Distinguish the project as either objectivedriven or product-driven
- Step 3.2 Analyse other project characteristics (including quality-based ones)
- Step 3.3 Identify high level project risks
- Step 3.4 Take into account user requirements concerning implementation

### Step 3: Analyze Project Characteristics

• Step 3.5 Select general Office approach in the light of the above

### Step 3: Analyze Project Characteristics

- Step 3.6 Review over a Pest de estimates Up to this stage,
  - the major risks of the project are identified
  - the overall approach of the project is decided
  - So, it is a good place to re-estimate the required effort and other resources for the project

### Step 4: Identify Project Products and Activities

- Step 4.1 Identify and describe project products
  - Identify all the products related to the project
  - Account for the required activities
- Step 4.2 Document generic product flows
  - To document the relative order of the products
- Step 4.3 Recognize product instances

## Step 4: Identify Project Products and Activities(cont'd)

- Step 4.4 Produce an ideal activity network
  - Activity network shows the tasks that have to be carried out as well as their sequence of execution for the creation of a product from another
- Step 4.5 Modify the ideal to take into account need for stages and checkpoints
  - To check compatibility of products of previous activities

## Step 5: Estimate Effort of each activity

Step 5.1 : Carry out bottom up estimates Step 5.2 : Revise plan to create controllable activities

### Step 6: Identify activity risks

- Step 6.1: Identify and quantify activity
- -based risks
- Step 6.2: Plan risk reduction and
- contingency measures where appropriate
- Step 6.3 : Adjust overall plans and estimates
- to take account of risks

#### Step 7: Allocate Resources

Step 7.1: Identify and allocate resources

Step 7.2: Revise plan and estimates to take

into account resource constraints

#### Step 8: Review/publicize plan

Step 8.1: Review Quality aspects of the project plan

Step 8.2 : Document Plans and obtain agreement

## Step 9 & 10: Execute Plan/ Lower level Planning