## Software Project Management

Durga Prasad Mohapatra

**Professor** 

CSE Deptt.

NIT Rourkela

# Project Evaluation and Programme Management cont...

#### **Contents**

- Programme management
- Benefits Management

#### Programme management

- There will be an element of risk with any single project.
- Hence, organizations should take a broad view of all its projects to ensure that while some projects may disappoint, organizational developments overall will generate substantial benefits.
- So, there is a need of proper **programme management**.

#### Programme management cont ...

#### Definition of programme:

'a group of projects that are managed in a co-ordinated way to gain benefits that would not be possible were the projects to be managed independently'

By D. C. Ferns

## Different types of Programmes

- Strategic programmes
- Business cycle programmes
- Infrastructure programmes
- Research and development programmes
- Innovative partnerships programmes

#### Different types of Programmes cont ...

- Strategic programmes: projects implementing a single strategy
- Business cycle programmes: projects that an organization undertakes within a planning cycle
- Infrastructure programmes: projects performing the activities of identifying common infrastructure and its implementation and maintenance
- Research and development programmes: projects involved in developing new innovative products based on some research
- Innovative partnerships programmes: projects based on collaboration by different organizations.

# Programme managers versus project managers

#### Programme manager

- Many simultaneous projects
- Personal relationship with skilled resources
- Optimization of resource use
- Projects tend to be seen as similar

#### Project manager

- One project at a time
- Impersonal relationship with resources
- Minimization of demand for resources
- Projects tend to be seen as unique

## Strategic programme management

- It is a different form of programme management where portfolio of projects all contribute to a common objective
- Based on OGC (Office of Government commerce) approach

## Creating a programme

- Initial planning document is the Programme Mandate describing
  - The new services/capabilities that the programme should deliver
  - How an organization will be improved
  - Fit with existing organizational goals
- A **programme director** should be appointed to provide initial leadership for the programme.

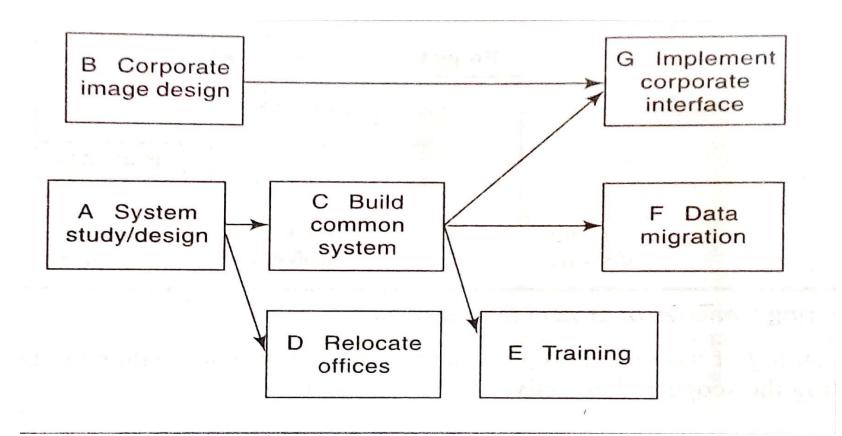
#### Next stages/documents

- The programme brief equivalent of a feasibility study: emphasis on costs and benefits
- The vision statement explains the new capability that the organization will have
- The blueprint explains the changes to be made to obtain the new capability

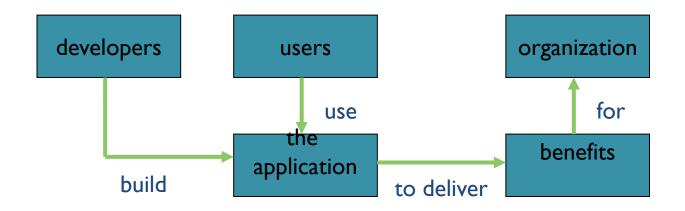
### Aids to programme management

- There may be physical and technical dependencies between projects
- This can be represented using **dependency diagrams** which are similar to activity networks

## An example of a dependency diagram



## Benefits management



- •Providing an organization with a capability does not guarantee that this will provide benefits envisaged need for benefits management
- •This has to be outside the project project will have been completed
- •Therefore done at programme level

#### Benefits management cont...

- It encompasses the identification, optimization and tracking of the expected benefits from a business change in order to ensure that they are actually achieved.
- To carry this out, you must:
  - Define expected benefits
  - Analyse balance between costs and benefits
  - Plan how benefits will be achieved
  - Allocate responsibilities for their achievement
  - Monitor achievement of benefits

#### **Benefits**

#### These might include:

- Mandatory requirement
- Improved quality of service
- Increased productivity
- More motivated workforce
- Internal management benefits
- Risk reduction
- Economies
- Revenue enhancement/acceleration
- Strategic fit

## Quantifying benefits

#### Benefits can be:

- Quantified and valued e.g. a reduction of x staff saving £y
- Quantified but not valued e.g. a decrease in customer complaints by x%
- Identified but not easily quantified e.g. public approval for a organization in the locality where it is based



- Discussed about programmes and programme management
- Discussed about benefits and benefits management

#### References:

- I. B. Hughes, M. Cotterell, R. Mall, Software Project Management, Sixth Edition, McGraw Hill Education (India) Pvt. Ltd., 2018.
- 2. E. M. Awad, Systems Analysis and Design, Second Edition. Galgotia Publications Pvt. Ltd., 2009.
- 3. R. Mall, Fundamentals of Software Engineering, Fifth Edition, PHI Learning Pvt. Ltd., 2018.a

## Thank you