Cost Benefit Analysis

Economic Assessment:

- ➢ Consider whether the project is the best among other options
- ➢ Prioritize the projects so that the resources can be allocated effectively if several projects are underway
- ➢ The economic assessment can be done by the following ways:
  - ✓ Cost-benefit analysis
  - ✓ Cash flow forecasting
  - ✓ Various cost-benefit evaluation techniques

Cost benefit analysis:

- • It is one of the important and common way of carrying "economic assessment" of a proposed information system.

- • This is done by comparing the expected costs of development and operation of the system with its benefits.

- • Any project aiming at return on investment must provide a greater benefit than putting that investment in a bank.

- • So it takes an account:
  - • Expected cost of development of system
  - • Expected cost of operation of system
  - • Benefits obtained

- • Assessment is based on:
  - ❖ Whether the estimated costs are executed by the estimated income.
  - ❖ And by other benefits

- • For achieving benefit where there is a scarce resource, projects will be prioritized and resources are allocated effectively.
- • The standard way of evaluating economic benefits of any project is done by "cost benefit analysis"
- • Cost benefit analysis comprises of two steps:
  - Step-1: identifying and estimating all of the costs and benefits of carrying out the project.
  - Step-2: expressing these costs and benefits in common units.

Step -1:

It includes
- • Development cost of system.
- • Operating cost of system.
- • Benefits obtained by system.

When new system is developed by the proposed system, then new system should reflect the above three as same as proposed system.

Example: sales order processing system which gives benefit due to use of new system.

Step -2:

- Calculates net benefit.
- Net benefit = total benefit = total cost.
- cost should be expressed in monetary terms.

Three types of cost

1. **Development costs:** includes salary and other employment cost of staff involved .

2. **Setup costs**: includes the cost of implementation of system such as hard ware, and also file conversion, recruitment and staff training.

3. **Operational cost**: cost require to operate system, after it is installed.

Three categories of benefits:

1. **Direct benefits**: directly obtained benefit by making use of/operating the system.
   Example: reduction of salary bills, through the introduction of a new , computerized system.

2. **Assessable indirect benefits**: these benefits are obtained due to updation / upgrading the performance of current system. It is also referred as "secondary benefits".
   Example: "use of user – friendly screen", which promotes reduction in errors, thus increases the benefit.

3. **Intangible benefits:** these benefits are longer term, difficult to quantify. It is also referred as "indirect benefits".
   Example: enhanced job interest leads reduction of staff turnover, inturn leads lower recruitment costs.

Benefits management:

Benefit management encompasses the identification, optimization and tracking of the expected benefits from a business change in order to ensure that they are actually achieved. To do this, we must

- Define the expected benefits from the programme;
- Analyze the balance between costs and benefits;
- Plan how the benefits will be achieved and measured;
- Allocate responsibilities for the successful delivery of the benefits;
- Monitor the realization of the of the benefits.

Benefits can be of many different types, including

- ❖ Mandatory compliance
- ❖ Quality of service
- ❖ Productivity
- ❖ More motivated work force
- ❖ Internal management benefits
- ❖ Risk reduction
- ❖ Economy

❖ Revenue enhancement/acceleration
❖ Strategic fit

A change could have more than one of these types of benefit. In fact, benefits are often inter- liked. An example of this is an insurance company which introduced a facility whereby when settling claims for damage to property, they directly arranged for constructors to carry out the remedial work. This improved quality of service for customers as it saved them the trouble of locating a reputable contractor, reduced costs to the insurance company because they could take advantage of the bulk purchase of services and improved staff morale because of the goodwill generated between the insurance company's front-line staff and the customer.

Quantifying benefits

We have already seen that benefits can be:

o **Quantified and valued** – that is, a direct financial benefit is experienced
o **Quantified but not valued** – for example, a decrease in the number of customer complaints
o **Identified but not easily quantified** – for example, public approval of the organization in the locality where it is based.

A particular activity might also have **disbenefits**. For example, increased sales might mean that more money has to be spent on expensive overtime working. The need for **benefit profiles** is that estimate when and how benefits will be experienced. Specific staff have to be allocated responsibility for ensuring that the planned benefits actually materialize.

Benefit cannot normally be monitored in a purely project environment because the project will almost certainly have been officially closed before the benefits start to filter through. Benefit management brings to the fore the powerful idea that developers and users are jointly responsible for ensuring the delivery of the benefits of projects.