SYSTEM ANALYSIS AND DESIGN

**MEASURES OF ECONOMIC FEASIBILITY**

**Cost Effectiveness - Time Value of Money**

**COST EFFECTIVENESS TECHQUES**

**Payback Period Analysis -** determines how much time

will lapse before accrued benefits overtake accrued and continuing costs.

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PV n = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

( 1 + 1 ) n

Return on Investment (ROI ) Analysis - compares the lifetime profitability of alternative solutions or projects.

ROI = Estimated Lifetime Benefits - Estimated Lifetime Costs

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Estimated Lifetime Costs

Net Present Value - result achieved after discounting all costs

and benefits and getting the difference of the sum of the discounted costs from the sun of the discounted benefits.

“If the result is positive, then the investment is good. If the result is negative, then the investment is bad.”

**COST**

the monetary value of goods and services that producers and consumers purchase. In a basic economic sense, cost is the measure of the alternative opportunities foregone in the choice of one good or activity over others. This fundamental cost is usually referred to as opportunity cost.

**Types or Categories of Cost**

Costs fall into two categories. There are cost associated with developing the systems and there are costs associated with a operating a system.

Development Cost

the cost a company incurs while researching and developing a new product or service.

Example:

* This can include the cost of materials, labor, and overhead associated with a given activity or activities.

**Total Development Cost (TDC)**

is the sum of all costs for a project including all undertakings necessary for administration, planning, site acquisition, demolition, construction or equipment and financing (including payment of carrying charges) and for ***otherwise carrying out the development of the project.***

**Operating costs**

refer to the costs incurred to maintain the day-to-day operations of your business. These include operating expenses like: rent, inventory costs. equipment. Insurance.