

CHAPTER 2

SOME ECONOMIC AND COST CONCEPTS

1. Value is the worth that a person attaches to a good or service. Utility is the power of a good service to satisfy human wants.
2. Utilities are produced or created by altering the physical environment.
3. Consumer goods and services directly satisfy human wants. Producer goods and services are a means to an end; namely, that of producing goods and services for human consumption.
4. The utility of consumer goods is determined by an individual who intends to consume them directly for the satisfaction derived. The utility of a producer good is not based on direct satisfaction of a want, but is based on its use as a means for producing consumer goods.
5. Consumer goods satisfy the needs of individuals who evaluate their needs subjectively. On the other hand, producer goods are valued as a means of producing consumer goods by altering the physical environment. The utility of altering the physical factors can be evaluated more objectively.
6. Economy of exchange occurs when utilities are exchanged by two or more people. Exchange takes place because the utilities are evaluated almost entirely, if not entirely, by subjective considerations.
7. Both parties to an exchange may profit because each is in a different economic environment and each evaluates the objects to be exchanged subjectively.
8. An attitudinal change may be brought about by persuasion in an exchange situation.
9. First cost is made up of the purchase price, shipping cost, installation cost, and possibly operator training cost. For a fabricated item, first cost would also include design, development, and construction or production cost.
10. Many engineering proposals that are otherwise sound are not implemented because the first cost involved is beyond the reach of the organization.
11. Operation and maintenance cost is made up of the costs for personnel, fuel and power, supplies, spare and repair parts, insurance and taxes, and a fair share of indirect or overhead cost.
12. Nonrecurring costs are those associated with getting an activity started, whereas recurring costs are those incurred to continue the activity once initiated.
13. Both the cost of acquisition and operation should be considered in the purchase of an air conditioner. By paying more initially, a more efficient unit might be acquired leading to a lower life-cycle cost.
14. Fixed cost is that group of costs involved in a going activity whose total will remain relatively constant throughout the range of operational activity. Variable cost is that group of costs which vary in some relationship to the level of activity.
15. Whether a cost is fixed or variable depends on how the cost varies with the range of activities of an enterprise. Thus, types of costs which are fixed for one firm may be variable for another.
16. An incremental cost is an increase in cost which occurs as a result of an incremental change in an activity level.

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17. Sunk costs are costs that have been incurred at some past date. Because decision-makers cannot control the past, the only costs that are relevant for decision purposes are those affected by present or future actions.
18. Life-cycle cost is the aggregate of the cost of acquisition, the utilization costs such as maintenance and operation, and the cost of phaseout and disposal.
19. Cost is committed at future points in the life-cycle as a consequence of decisions made at earlier points in time. Committed life-cycle cost will exceed actual cost incurred until the end of the life cycle when all cost is committed and all incurred cost is recorded by the accounting system.
20. Early life-cycle activities and decisions are the cause of costs to be incurred in the future. The commitment is greatest during the early phases of the life cycle and so great care should be exercised.
21. Interest is the amount charged for the use of funds, whereas an interest rate is the charge expressed as a percent per time period.
22. The market rate for interest is the rate established by market forces of supply and demand. It is determined by mutual agreement.
23. A lender will consider the probability that a borrower will not repay, the expenses incurred in loan administration, the compensation needed to offset being unable to use the money in other ways, and inflationary effects.
24. Because the interest charged is determined by a rate keyed to time, money has time value. A dollar in the future is worth less than a dollar now because of the time dependent interest rate.
25. Money has earning power because it may be used to acquire capital equipment which may increase productivity.
26. High interest rates add to the cost of capital equipment. This tends to offset the extra earnings made possible by increased productivity.