UNIT -1

BASICS OF MANAGERIAL ECNOMICS

LESSON 5- Tools and Technique of Decision Making

So this is the last lesson of this Unit i.e. Unit – 1.

After doing this lesson you will be able to know the various tools and techniques of decision making. How these tools and technique are useful for managers in making the right decision.

But before knowing the tools and technique of decision making can you answer some of my questions:

- Is decision making a process?
- Are there any particular steps required for decision making?
- Is decision making depends on the condition or situations?
- What are the various conditions affecting decision making?

o.k.
Fine, tell me why decision making is required?

See we all know we have unlimited wants, and the means to satisfy those wants are very limited. We have to make choices. We cannot have whatever we want. We have to make preferences amongst our choices. And we will prefer those thing first which is most needed. Therefore our choice depends on our need. What we need the most is to be chosen first.

Factors influencing managerial decision:

Now its clear that managerial decision making is influenced not only by economics but also by several other significant considerations. While economic analysis contributes a great deal to problem solving in an enterprises it is important to remember that three other variable also influences the choices and decision made by the managers. These are as follows:

Human and behavioral considerations
Technological forces
Environmental factors.

Steps in decision making:

there are certain things which are to be taken into account while making decisions. No matter what's the size of the problem but like every thing decision making should also be in certain steps.

Following are the various steps in decision making:

- Establish objectives
- Specify the decision problem
- Identify the alternatives
- Evaluate alternatives
- Select the best alternatives
- Implement the decision
- Monitor the performance

Business decision making is essentially a process of selecting the best out of alternative opportunities open to the firm. The above steps put managers analytical ability to test and determine the appropriateness and validity of decisions in the modern business world.
Modern business conditions are changing so fast and becoming so competitive and complex that personal business sense, intuition and experience alone are not sufficient to make appropriate business decisions.

It is in this area of decision making that economic theories and tools of economic analysis contribute a great deal.

Application of economic tools:

For e.g.
A firm plans to launch a new product for which close substitutes are available in the market. One method of deciding whether or not to launch the product is to obtain the services of the business consultants or to seek expert opinions. If the matter has to be decided by the managers of the firms, two areas which they need to know:

- Production related issues
- Sales prospects and problems

Basic economic tools in managerial economics for decision making:

Economic theory offers a variety of concepts and analytical tools which can be of considerable assistance to the managers in his decision making practice. These tools are helpful for managers in solving their business related problems. These tools are taken as guide in making decision.

Following are the basic economic tools for decision making:
1) Opportunity cost
2) Incremental principle
3) Principle of the time perspective
4) Discounting principle
5) Equi-marginal principle

1) Opportunity cost principle:

By the opportunity cost of a decision is meant the sacrifice of alternatives required by that decision.
For e.g.
a) The opportunity cost of the funds employed in one's own business is the interest that could be earned on those funds if they have been employed in other ventures.
b) The opportunity cost of using a machine to produce one product is the earnings forgone which would have been possible from other products.
c) The opportunity cost of holding Rs. 1000as cash in hand for one year is the 10% rate of interest, which would have been earned had the money been kept as fixed deposit in bank.

Its clear now that opportunity cost requires ascertainment of sacrifices. If a decision involves no sacrifices, its opportunity cost is nil.
For decision making opportunity costs are the only relevant costs.

2) Incremental principle:

It is related to the marginal cost and marginal revenues, for economic theory. Incremental concept involves estimating the impact of decision alternatives on costs and revenue, emphasizing the changes in total cost and total revenue resulting from changes in prices, products, procedures, investments or whatever may be at stake in the decisions.
The two basic components of incremental reasoning are

1) Incremental cost
2) Incremental Revenue

The incremental principle may be stated as under :
" A decision is obviously a profitable one if –

a) it increases revenue more than costs
b) it decreases some costs to a greater extent than it increases others
c) it increases some revenues more than it decreases others and
d) it reduces cost more than revenues"

3) Principle of Time Perspective

Managerial economists are also concerned with the short run and the long run effects of decisions on revenues as well as costs. The very important problem in decision making is to maintain the right balance between the long run and short run considerations.

For example,(illustration)
Suppose there is a firm with a temporary idle capacity. An order for 5000 units comes to management's attention. The customer is willing to pay Rs 4/- unit or Rs.20000/- for the whole lot but not more. The short run incremental cost(ignoring the fixed cost) is only Rs.3/-. There fore the contribution to overhead and profit is Rs.1/- per unit (Rs.5000/- for the lot)

Analysis:

From the above example the following long run repercussion of the order is to be taken into account :

1) If the management commits itself with too much of business at lower price or with a small contribution it will not have sufficient capacity to take up business with higher contribution.
2) If the other customers come to know about this low price, they may demand a similar low price. Such customers may complain of being treated unfairly and feel discriminated against.

In the above example it is therefore important to give due consideration to the time perspectives. " a decision should take into account both the short run and long run effects on revenues and costs and maintain the right balance between long run and short run perspective".

4) Discounting Principle :

One of the fundamental ideas in Economics is that a rupee tomorrow is worth less than a rupee today. Suppose a person is offered a choice to make between a gift of Rs.100/- today or Rs.100/- next year. Naturally he will chose Rs.100/- today. This is true for two reasons-

i) the future is uncertain and there may be uncertainty in getting Rs. 100/- if the present opportunity is not availed of

ii) 2) even if he is sure to receive the gift in future, today's Rs.100/- can be invested so as to earn interest say as 8% so that one year after Rs.100/- will become 108

5) Equi - marginal Principle:

This principle deals with the allocation of an available resource among the alternative activities. According to this principle, an input should be so allocated that the value added by the last unit is the same in all cases. This generalization is called the equi-marginal principle.

Suppose, a firm has 100 units of labor at its disposal. The firm is engaged in four activities which need labors services, viz, A,B,C and D. it can enhance any one of these activities by adding more labor but only at the cost of other activities.

FURTHER READINGS:

1) MANAGERIAL ECONOMICS : By: R.L VARSHNEY
K.L MAHESHWARI

2) MANAGERIAL ECONOMICS : By: H. CRAIG PETERSON
W. CRIS LEWIS