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## **UNIT 7 CONTROLLING**

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### **Objectives**

After reading this unit, you should be able to:

- Understand the meaning of control
- Identify the steps in the control process
- Understand the features and elements of control
- Appreciate the essentials of a good control system
- List out the different types of control
- Understand the techniques of control

### **Structure**

- 7.1 Introduction
- 7.2 Meaning
- 7.3 Importance
- 7.4 Features
- 7.5 The Control process
- 7.6 Essentials of a good control system
- 7.7 Types of control
- 7.8 Techniques of Control
- 7.9 Summary
- 7.10 Self-assessment questions
- 7.11 References/ Further Readings

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### **7.1 INTRODUCTION**

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Controlling refers to that activity where an effort is made to ensure that all the activities of planning, organizing, and leading are integrated to have a control of the situation. In fact controlling is directly related to planning. The control process ensures that the plans are being implemented properly. If we see the functions of management cycle- planning, organizing, directing and controlling – planning moves forward into all other functions and control reaches back. It is the final link in the functional chain of management activities and brings the management into a full circle. Thus it assumes significance in the process of management.

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### **7.2 MEANING**

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Control is a significant function of management. Managers follow the control process where they assure that the resources are obtained and are used optimally to achieve the objectives of the organization. According to Koontz

and O'Donnell, it is a process of measuring and correcting the activities of subordinates to ensure that events conform to plans. Thus this definition highlights the measures for control and corrective action taken by the managers to ensure the planned implementation of activities in the organization.

While highlighting the principles of management, Henry Fayol included the control function as an important principle of management. His perspective is in conformity with Koontz O' Donnell relating to the relationship between planning and control. Fayol has included the managerial instructions to his subordinates and the principles that the managers established to have an effective control over the processes and activities. According to Fayol, it consists of verifying whether everything occurs in conformity with the plans adopted, the instructions issued and the principles established. It aims to point out weaknesses and errors in order to rectify them and prevent reoccurrence. Thus, it is understood as a process which measures current performance and guides it towards the pre-planned aims and objectives. Its essence lies in checking the progress against the plans,, setting up of individual and organizational goals and seeing that they are achieved as per plan without any errors.

### **7.3 IMPORTANCE**

Control is important because

- It identifies the areas of weaknesses and errors so that they can be rectified and prevents reoccurrence.
- The range of deviation from the original plan could be identified.
- It stimulates action which will gear up all the departments.
- It is an important function enabling the manager to take clear cut decisions.
- A well designed control system ensures good results.
- As it is directly related to planning, it can make planning effective and meaningful

#### **Activity-1**

We all experience that time flies without our knowledge. Have you ever attempted to control your time on a single day? Make a note of your activities on a single day, try and control your time and see if it has made a difference to see how important control is.

- 1.
- 2.
- 3.
- 4.

## 7.4 FEATURES

Controlling has the following features:

- Controlling is a circular process. Management function begins with planning and ends with controlling and hence it helps the manager to identify a deviation from the plan, compelling the activities to take place with no deviations and as per plan.
- Control is a continuous process. Managers constantly revise the standards and plan accordingly. Thus the process is continuous, ensuring that there is no variation between the plan and performance.
- Control is a forward looking activity, where the managers continuously observe the past and plan for the future. Managers learn from the mistakes committed in the past and exercise effective control to see that they don't recur in the future.
- Control is an all pervasive activity. It applies at every level of management, although the scope of control varies across levels.
- Control demonstrates a positive approach. It can never be an obstacle or hindrance; rather it helps the manager to successfully manage against pre-determined objectives. The process is designed in such a way that it can pinpoint the deviations and enhance performance.

## 7.5 THE CONTROL PROCESS

Control is the key driver for the success of the organization. The control process has five basic elements. They are

### **Establishment of Standards**

A standard is a criterion against which future results could be measured. Standards are created when objectives are set during the planning process. Control begins with the establishment of standards. An organization strategically plans and the plans are broken down into department level, unit level and individual objectives. Often, it is found that standards are of physical nature and are expressed in terms of the number of units, clock hours and other measures. Organizational standards are also expressed in terms of financial measures more in the nature of increase in revenues, expenditure, investments etc. Some of the standards relating to the people are also in the nature of job satisfaction of employees, the brand of the organization, the ranking of the organization etc. Whatever may be the choice of standards, care has to be taken to see that they are measurable, practical and attainable and not too difficult to achieve. There are tangible standards like the sales volumes, financial results, etc. and intangible standards like those related to people issues like job satisfaction, job enrichment, etc. A tangible standard is easy to evaluate and control compared to the intangible standards. Technology and the technological tools have however, made the standards easy to measure and quantify.

## Measurement of Actual Performance

The very purpose of control is to measure actual performance. Monitoring and measurement is a continuous activity and involves collection of data that represents the actuals to the intended so as to help the manager in his control function. While establishing standards, if there is clarity and uniformity, measuring the actual performance would be an easy task. It also depends on the speed with which the control information is required, otherwise the delay in measurement will cause delays in taking the corrective action. Normally an organization would evaluate the effort, effectiveness, adequacy, efficiency and the process followed.

## Comparison of Actual Performance with the Original Standards

Once the standards are established and the actual performance is measured; it has to be compared with the original standards. It might result in either meeting the standards or deviating from the standard. If the original standards are met the organization can plan for higher standards, but if the manager has observed deviation, corrective action has to be taken. Minor deviations could be tolerated but the management has to view the major deviations seriously.

## Taking Corrective Action

If the manager has observed deviations, efforts have to be taken by him for corrective action. The measurement of performance and its comparison with the original standard should lead to taking steps towards correcting those deviations and checking the original standard itself. The speed with which action is taken and the methods used towards the same determine the process of controls in future. Corrective action can take place in the simplification of processes, use of advance tools and techniques restructuring the organization, redefining the people management practices, effective communication methods and channels etc. The corrective action should be such that the planned performance takes place with the corrective action taken by the organization.

## Feedback

Feedback is an important element in the control process. The manager who is in charge of control will receive a lot of information and feedback on the actual performance in comparison with the planned standards. A positive feedback sends positive results and achievement of performance standards. A negative feedback however, compels the manager to take corrective action so that it motivates the subordinates towards performance and standards.

## Activity-2

Interview an owner of a small roadsideprovision/kirana store, medical shop or even an apparel/cloth shop employing 2 to 5 employees Ask him how he controls his activity to understand the process. Write down to check the control process is the same as you have studied.

## 7.6 ESSENTIALS OF A GOOD CONTROL SYSTEM

Controlling is essentially a checking function of the manager. Organizations do have effective control points and design them carefully to help them grow and sustain its growth. There are certain characteristics of effective control system, if followed will benefit the organization. They are:

- The suitability is an essential element in the control activity. Controls differ in different units/ departments. For example, sales and marketing have different controls compared to the production department or finance department in a manufacturing setting. Again, a manufacturing set up is different from a service organization. It has thus to be appropriate and adequate.
- One of the significant factors of a good control system is the flexibility with which an organization can work. When standards change, raised or get changed due to unavoidable uncertain external environment, the needed flexibility has to be built into the control system.
- The most important element of a good control system is the inbuilt mechanism which will allow immediate reporting of deviations from established standards.
- A forward looking control system helps the organization to ensure that the deviations do not recur in future. Since managers do not have control over the past, they do have the mechanism to see that all deviations are corrected based on the learning that they have had in the process of deviations.
- A good control system should be able to pinpoint whether it is a simple deviation or a vital deviation leading to a strategic initiative.
- Effective control presupposes defined standards so that they are objective and attainable
- Control systems should be affordable and within the reach of the organization.
- The control system should be designed in such a way that is easy to understand and seen as objective by the individual who uses it. Complex control system defeats the very purpose of control as it becomes difficult to understand and implement the same.
- Once the deviations are detected, the control system must allow the manager to take corrective action and control the situation on hand. When people work in organizations, failures are bound to occur and hence the control system should be amenable for remedial action
- Timely action is the crux of an effective control system. Hence, controls should report the results in a timely manner
- It is not possible to control everything in an organization. Hence control

systems should be selectively designed at critical check points.

- Accurate, objective and measureable data will help the organization to take the corrective action immediately so that the work flow in the departments do not suffer.

### Activity-3

Recall the elements of a good control system. Write down as you recall.

- 1.
- 2.
- 3.

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## 7.6 TYPES OF CONTROL

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Controls can be classified into several types. They are most effective only when they are applied at critical points. The unit heads/managers can implement the controls before the process begins, known as *feed forward*, during the process, which is known as *concurrent* or after it is completed, which is known as *feedback*. In the feed forward controls, the goal is to prevent anticipated problems and hence the focus of control is on the operations before it begins. Regular maintenance, which is regularly done for automobiles, machinery etc. are examples of feed forward control, because they prevent problems in the operation of machines, automobiles, etc. Controls like standard cost control are also adopted in organizations to check the cost of a product before commencing the commercial production.

Concurrent controls apply to processes as they are happening. Examples of concurrent controls include any type of steering or guiding mechanism such as direct supervision when the operation is being performed or automated systems, such as computers programmed to inform the user when they have issued a wrong command and also the quality checks that the organizations have to ensure quality standard.

Feedback controls are exercised after the completion of the activity for reviewing the results of operations. They guide future planning, inputs and process designs. The timely – weekly, monthly, quarterly and annual reports- are examples which can ensure immediate adjustments at the workplace. Budgetary control is also an example of post action controls.

### Activity-4

Write 2 examples each for the feedforward, concurrent and feedback control, as you observed in any activity

- 1
- 2
- 3
- 4.
- 5
- 6

In addition to these types, organizations also use the *internal control system* through the audit, risk and compliance division of the organization. Internal controls relate to the organizational methods in order to safeguard its assets, check and verify the accuracy of its data, promote efficiency in operations and encourage adherence to the prescribed policies, procedures and rules for compliance. Thus, control and its scope extend beyond the matters that normally the accounting and finance departments engage in. In layman terms, internal controls help organizations to strictly follow policies, procedures and rules so that the organizational objectives ultimately are achieved.

Two types of internal controls are normally observed in organizations—*preventive and detective*. Both the types of controls are used by organizations because they serve different purposes. The internal controls assume significance because organizations continually reengineer their processes and procedures in order to grapple with change. A series of steps are followed in order to manage the company in the right direction with effective controls.

As the name itself suggests, preventive controls decrease the chance of errors before they occur and prevents many untoward incidents/ events that occur in the course of managing a company. Such controls are critical as they reinforce the quality standards of the organization. Examples include preapprovals that the organization insists on the employees like client visits, travel authorization, organizational access controls including access to passwords, representing the organization at official events, etc.

Detective controls, on the other hand, help the organization to detect errors or problems after the transaction has occurred. It is but natural for mistakes to occur in the management of a company but what is more important is to detect the lapses in order to take corrective action. Some examples include the monitoring of the departmental transactions, review of budget heads and expenditure incurred to observe the differences and the justification thereof, the inventories and stocks maintained by the company, etc.

#### Activity-5

Observe your own activities like preparing for the examination. Write down what could be the possible preventive and detective controls you can have in reaching your goal. Repeat the same process with any organization.

- 1.
- 2.
- 3.

### **7.8 TECHNIQUES OF CONTROL**

There are various techniques of control. Control technique is a specific method or procedure which deals with the pertinent organizational information with which the management is able to implement a suitable control strategy in order to assess the performance of the organizational operations. The standard control techniques followed by organizations are as follows:

- a. *Gantt chart* – Gantt chart is an instrument which helps the manager in planning and controlling simple projects. The manager can plot the process in each of the operations along with the expected time and see for himself whether the progress is on time, behind time or ahead of time. Any deviations could be easily seen and corrective action can be taken immediately. It facilitates control by continuously comparing the actual performance against the expected performance and hence the manager/the unit head can keep the processes under control. An example of Gantt chart for any starting a project in a month is as follows

**Figure-1- Gantt Chart for Project Management**

Preparation & Planning	1 <sup>st</sup> Week	2 <sup>nd</sup> Week	3 <sup>rd</sup> Week	4 <sup>th</sup> Week
<b>Develop proposal</b>				
<b>Approve proposal</b>				
<b>Recruit Team</b>				
<b>Develop &amp; Test</b>				
<b>Specify Details</b>				
<b>Develop prototype</b>				
<b>Approve prototype</b>				
<b>Develop &amp; test beta version</b>				
<b>Apply corrections</b>				
<b>Approve final version</b>				
<b>Implementation</b>				
<b>Train Users</b>				
<b>Roll out final version</b>				

As can be seen in the figure-1, any project has to be planned. The same activity of planning acts as a control mechanism. A typical project will have to get prepared and planned, develop and test, along with its implementation. There are other activities that are involved in each of the activities of planning, development and implementation. Each of the activities are planned on a weekly basis. When the plan gets implemented, the chart can be used as a control technique for implementing the project.

### Activity-6

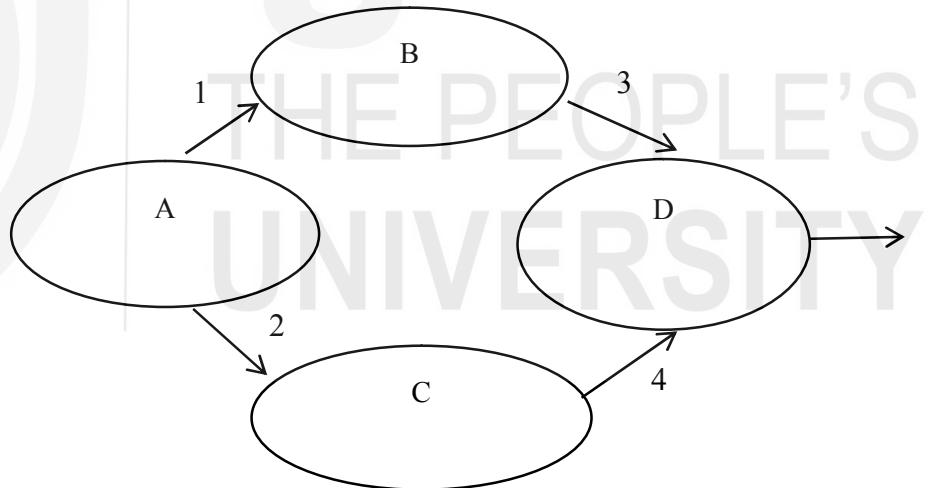
Use the Gantt chart to prepare for any activity which you consider as important. Make a chart and write down how helpful the Gantt Chart was, in having control of your activity. It can be used for preparing for your examination preparation also.

- 1.
  - 2.
  - 3.
  - 4.
- b. *Breakeven analysis*- Breakeven analysis is a useful tool of control. It helps management to understand a set of relationships among fixed cost, variable cost, total cost, price per unit, level of output, profit/ loss etc. The manager can modify the value of any of these variables in case of a deviation through this analysis. Breakeven analysis examines the relationship between total revenue and total cost at various levels of production so as to establish a breakeven point. The breakeven point demonstrates that the organization can neither get profit nor loss, where total revenue equals total cost. It focuses on the marginal concept as a control tool. The marginal differences in the values of variables, the results of the variation can be evaluated and recorded, so that the marginal results of the managerial decision by showing the effect of incremental changes in volume or price etc. Breakeven analysis can help the manager only when the prices, technology, efficiency levels, machinery use etc. remain the same. In a dynamic world, all these factors change and hence the tool has limited use.
- c. *Budgetary controls* – Budget is the most universal device of control. It is a statement which provides the estimates of revenue and expenditure for a stated period of time. It forces the managers to account for the utilization of capital and other resources. It is a managerial responsibility to collect the information about the actual cost incurred against budgeted cost, so that deviation could be corrected and plans prepared so that major deviations do not take place in future. Budgets are used as controls measures in the various activities of the organization such as production, marketing, human resource management etc.
- Managers have to deal with various types of budgets which depend on the nature of activity. Master budgets, materials and utilities budget, revenue and expense budgets, capital expenditure budgets, sales budgets, production budgets, flexible/ variable budget, balance sheet etc. are some of the types of budgets normally found in organizations. Zero based budgeting is also a type of budgeting used by organizations. The budget is prepared from a zero base, as if it was the first budget of the organization. This type of budget provides for a greater justification for the continuation or the termination of an activity. Since the plan is broken down into departmental plans, it allows the participation of everyone in the exercise. Requirements of time, limits this type of budget and organizations also found it expensive, as it requires minute scrutiny.
- d. *PERT and CPM* – PERT is an acronym for Program Evaluation and Review Technique. It is most appropriate for controlling complex unique and one time projects, like building projects, ship building, and airport building etc. It can be used as a planning tool as well as the controlling tool. In its planning function, the total expected time to complete a

project can be estimated. As a control activity, it can help in estimating the probability of meeting project deadlines to observe the deviations. The construction of the PERT network requires detailed analysis and assessment of each component in the total project. The various sequence of activities needed to accomplish the stated goal have to be worked out and appropriately timed so that the project can be delivered on time.

PERT expresses the program as a network of events and their inter-relationships with each other. Each component of the program has to be analyzed and assessed so that the goal can be achieved. Further, each event and the activity has to be timed properly for PERT to deliver results. Figure-2 shows the events as A,B,C and D and 1,2,3 and 4 as activities which take time to complete. All the activities are interdependent and structured in a logical way. Each of the activities have to be timed in such a way that no activity will start without completing the preceding activity. B cannot be started without completing A. Similarly, C cannot start without completing B. This applies to all the activities that are listed in the PERT. Time estimates are made for each activity as the *most optimum results*, *most likely results* and *the most pessimistic results*, depending on the estimates that are made. Assessment and control is dependent on the events, activities and the time estimates that are arrived at, while planning for the same.

Figure-2- Events and activities in a PERT chart



*CPM refers to the Critical Path Method.* The critical path is simply the longest path in terms of the amount of time the entire project will take. If the events on the critical path are delayed, then the entire project will be delayed along with the project delivery. Any path which is other than the critical path is known as the sub critical path , which is shown shorter than the critical path and the difference in time between the critical path and the sub critical path is known as the slack time and it provides the cushion for the sub critical sequence. Thus PERT and CPM are useful tools for managers to predict the impact of changes and also take necessary corrective action.

In addition, there are other controls which are in the nature of internal audit, special reports for special projects, confidential reports about the working

abilities of subordinates, information control through IT, MIS and other computer applications leading to effective control in the current situations, personal observation which provides observations on the performance and standards of performance. Thus the control techniques involve the use of budgetary and non-budgetary tools to use them as controlling devices.

## 7.9 SUMMARY

Control is a fundamental managerial function which measures current performance and guides it towards some pre-determined objectives. The essence of control is action where the managers can spontaneously apply corrective action in case of deviations from the plan. It can make planning effective and meaningful. However the managers have to follow the control process while discharging their function. An organization uses both budgetary and non - budgetary control mechanisms, which help in achieving the goals of the organization.

## 7.10 SELF-ASSESSMENT QUESTIONS

1. What is controlling as a function? What are the features of control?
2. “Planning becomes worthless without control”. Comment on the importance of control in the light of this statement.
3. Highlight the characteristics of a good control system?
4. Describe the basic elements of the control process with examples?
5. What is PERT and CPM? Under what circumstances would you use the techniques as the best method?

## 7.11 REFERENCES/ FURTHER READINGS

1. R.C. Dorf and R.H. Bishop, Modern Control Systems. New Jersey: Pearson Education, 11<sup>th</sup> Edition, 2008.
2. Certo, Samuel, C. Principles of Modern Management: Functions and Systems. William C. brown & Company, 1983.
3. Anthony, R.N., Dearden, J, & Bedford, N.M. Management Control Systems. Illinois: Richard D Irwin, 1984
4. Miller, Robert, W. How to Plan and control with PERT. Harvard Business Review. March/April, 1962. Pp. 93-104.
5. K. Ogata, Modern Control Engineering. New Jersey: Prentice Hall, 3<sup>rd</sup> Edition, 1997.
6. Daniel Katz, The Social Psychology of Organizations. New York: Wiley, 1929.