

Controlling

The managerial function of controlling is the measurement & correction of performance in order to make sure that enterprise objectives and the plans devised to attain them are closely related.

- Planning and controlling are closely related.
- Controlling is the function of every manager from president to supervisor in an organization.

The Basic Control Process:

It consists of the following three steps:

- ❖ Establishing standards.
- ❖ Measuring performance against these standards.
- ❖ Correcting variations from standards and plans.

Critical Control Points & Standards:

The points selected for control should be critical. The principle of critical point control states that – “Effective control requires attention to those factors critical to evaluating performance against plans”.

Following are the types of Critical Point Standards used:

- **Physical standards** – they are non-monetary measurements and are common at the operating level, where materials are used, labour is employed, services are rendered, and goods are produced.

They may reflect quantities such as labour hours per unit of output, Kg of fuel per HP power generated, units of production per machine hour etc.

It may also reflect quantities such as hardness of bearings, closeness of tolerances, durability of fabrics etc.

- **Cost standards** – cost standards are monetary measurements, and like physical standards, are common at the operating level. They attach monetary values to the costs of operations. It reflects various costs as direct & indirect cost per unit produced, labour cost per unit, material cost per unit, machine hour cost etc.

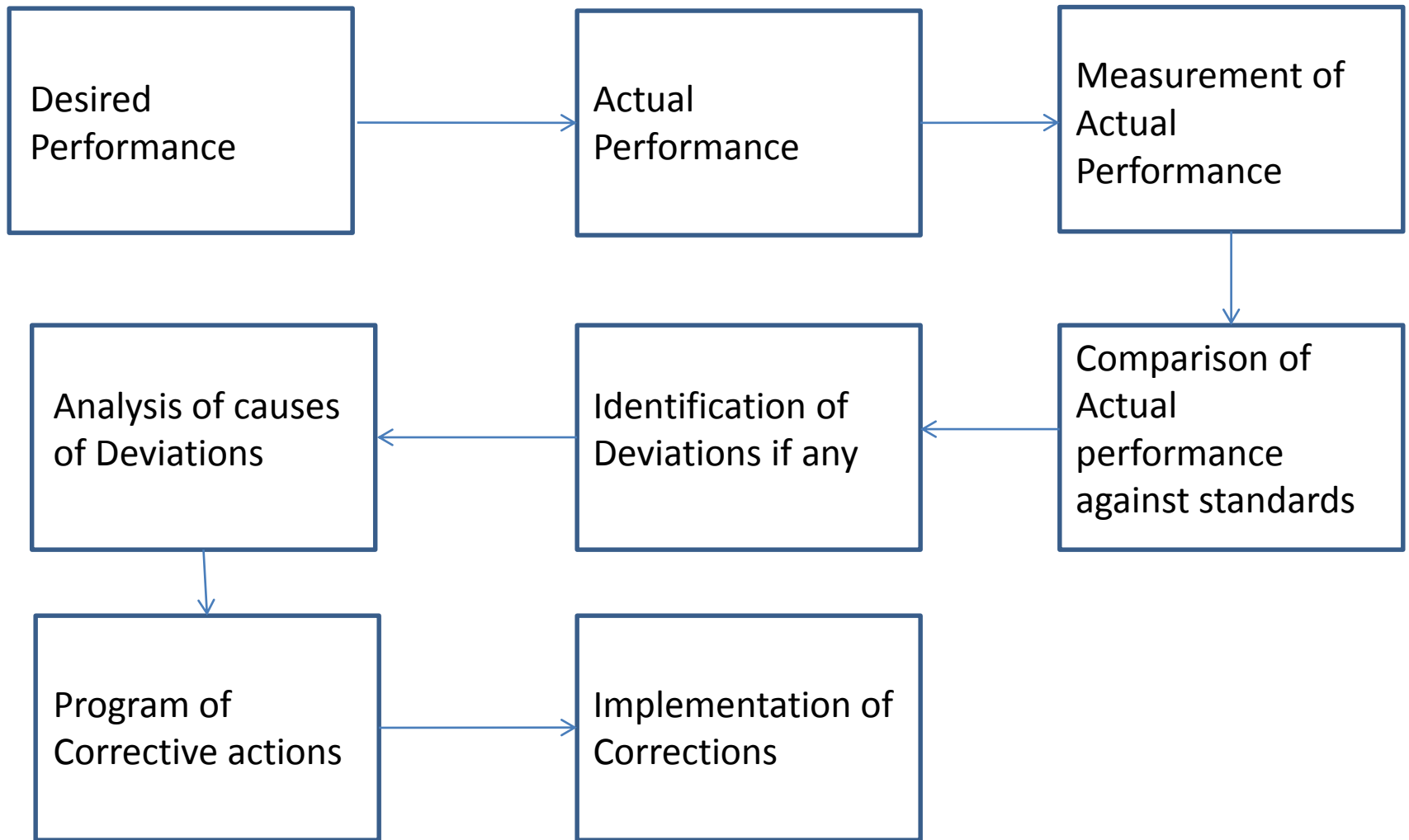
- **Capital standards** – there are a variety of capital standards, all arising from the application of monetary measurements to physical items. They have to do with the capital invested in the firm rather than with operating costs & are therefore primarily related to balance sheet rather than to income statement. ***Most widely used capital standards are Return on Investment (ROI).*** The Balance Sheet will disclose other capital standards such as current assets to current liabilities ratio, debt to net worth ratio, fixed investment to total investment ratio, receivables to payables ratio (Both cash & credit), size & turnover of inventories.

- **Revenue standards** – they arise from attaching monetary values to sales. They may include standards such as revenue per bus passenger mile, average sales per salesmen or customer etc.
- **Program standards** – a manager may be assigned to install a variable budget from a program for formally following the development of new products, or a program for improving the quality of a sales force. Although a subjective judgment may have to be applied in appraising program performance, timing & other factors can be used as objective standards.

- **Intangible standards** – More difficult to set these standards since these standards are not expressed either in physical or monetary measurements.
 - What can one use for determining whether the advertising program meets both short & long run objectives?
 - Whether the public relations program is successful?
 - Are supervisors loyal to the company objectives? etc.

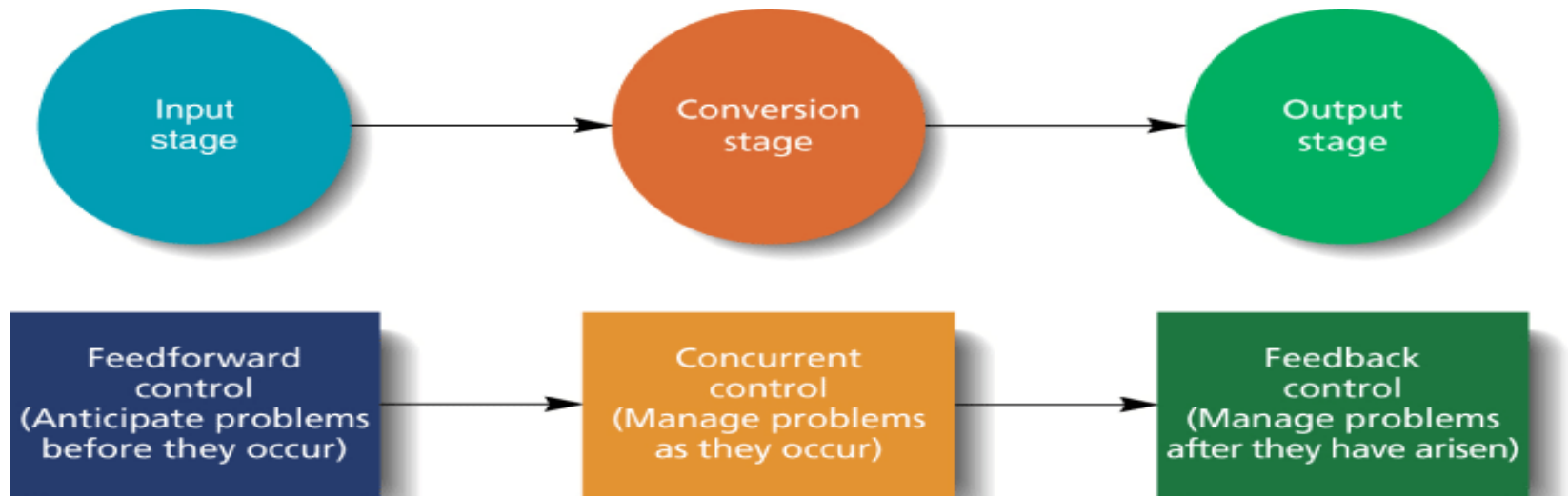
Many intangible standards exist in business. Considerable judgment, trial & error, and even an occasion may be used for setting and using the intangible standards.

- **Goals as standards** – the quantitative goals set by the organization act as standards, since these set goals are tangible and can be suitably used as standards for the purpose of control.
- **Strategic plans as standards** – strategic plans drawn by organizations may also act as standards and used as critical points for strategic control purposes.



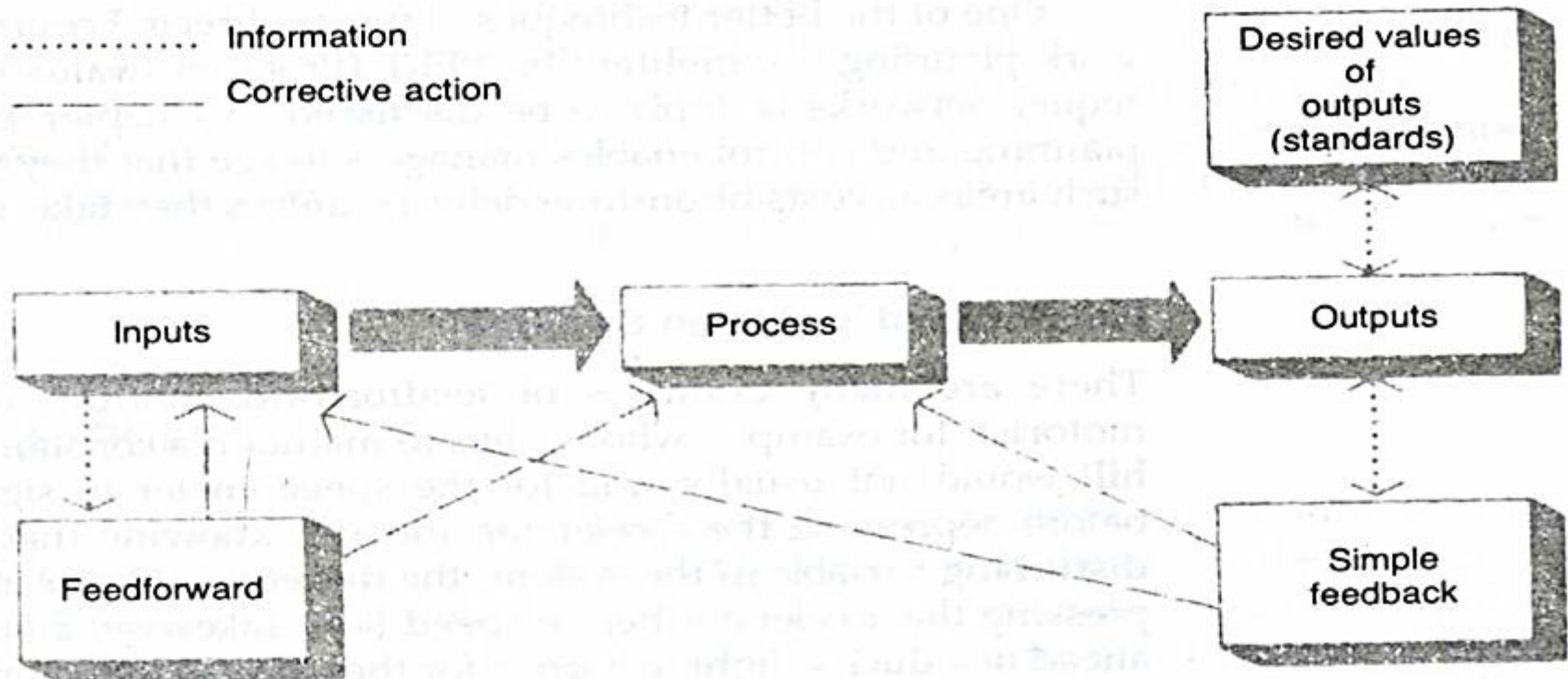
Feedback loop of Managerial control

Three types of Control:



- Feed forward Controls
 - Control that allows managers to anticipate problems before they arise
- Concurrent Controls
 - Give managers immediate feedback on how efficiently inputs are being transformed into outputs
- Feedback Controls
 - Control that gives managers information about customers' reactions to goods and services

..... Information
----- Corrective action



COMPARISON OF SIMPLE FEEDBACK AND FEEDFORWARD SYSTEMS.

CONTROL TECHNIQUES:

BUDGET: It is a widely used device for managerial control. Budgeting is the formulation of plans for a given future period in numerical terms. **Budgets are the statements of anticipated results either in financial terms – as in revenue & expenditure statements, or in non-financial terms – as in budgets of direct labour hours, materials, sales volume, units of production** etc.

Budgets correlate planning & allow authority to be delegated without any loss of control. Only when the plans are complete, coordinated & developed enough to be fitted into departmental operations can a useful departmental budget be prepared as a instrument of control.

Types of Budgets:

Following types of budgets are used in control:

- **Revenue and expense Budget** – the most basic of these budgets is the sales budget, which is a formal & detailed expression of the sales forecast. Operating expense budget may deal with individual items of expense, such as travel, data processing, entertainment, advertising, telephone insurance etc.
- **Time, Space, Material & Product Budget** – Many budgets are better expressed in quantities rather than in monetary terms.

Although such budgets are translated into monetary terms, they are much more significant at a certain stage in planning & control if they are expressed in terms of quantities. More common of these are Direct labour hours, Machine hours (Time), Units of material (Material), Cu. ft space (Space) and Units produced/sold (Product).

- **Capital Expenditure budget** – it outlines clearly the capital expenditures for plant, machinery, equipment, inventories & other items. It may be for the short term or the long term. But they are tied in fairly with long term planning, since a business takes a long time to recover its investments.

- **Cash Budgets** – It is simply a forecast of cash receipts and cash expenditure. The availability of cash to meet obligations as they fall due is indicated by the cash budget. It also indicates the availability of excess cash, thereby making it possible to plan for profit-making investment of surpluses.

Dangers in Budgeting :

- **Over-budgeting** – There is a danger of over-budgeting through spelling out minor expenses in detail and depriving managers of needed freedom in managing their departments.

- **Over-riding enterprise objectives/goals** – Another danger lies in allowing budgetary goals to become more important than enterprise goals. In this zest to keep within budget limits, managers may forget that they owe primarily to enterprise objectives.
- **Hiding inefficiency** – it may be used to hide inefficiencies of managers.
- **Causing Inflexibility** – it is one of the greatest dangers in budgets. flexibility in decisions will be lost due to budgets and decision will become rigid.

Variable Budgets:

- Dangers arise from inflexibility in budgets because maximum flexibility consistent with efficiency underlies good planning. Attention has been increasingly given to variable/flexible budgets. These budgets are designed to vary usually on as the volume of sales/ some other measure of output varies. Some costs do not vary with volume of output, particularly in the short period of time. Costs that vary with volume of output range from those that are completely variable to those that are only slightly variable.

Item of expense	Monthly sales volume (000 's)				
	20	40	60	80	100
Material					
Labour					
OH					
Cost of Production					
Engineering					
R & D					
S & D					
Administrative expenditure					
Total costs					
Profit					
% Profit to sales					

A typical variable budget is shown. A fixed budget will work as well with good plans and sales forecasts, a variable budget forces study of & preoccupation with, factors which translate workload into labour and expense need.

Zero based Budgeting:

- Another type of budgeting, the purpose of which has much in common with the purpose of a well operated system of variable budgeting, is zero base budgeting. The idea behind this technique is to divide enterprise programs into “packages” composed of goals, activities & needed resources & then to calculate costs for each package from the ground up.

By starting the budget of each package from base zero, costs are calculated afresh for each budget period, thus avoiding the common tendency in budgeting of looking only at changes from a previous period.

Non-budgetary control devices:

Some of the non-budgetary control devices are as follows:

- Statistical data
- Special reports and analysis
- Operational audit
- Personal observation

Statistical Data:

- Most managers understand statistical data the best when the data is presented in chart or graphic form, since trends and relationships are then easier to see. Moreover if data are to be meaningful, even when presented on charts, they should be formulated in such a way that comparisons to some standard can be made.
- Since no manager can do anything to history, it is essential that statistical reports show trends so that the viewer can extrapolate where things are going. Hence, most data when presented on charts, should be made available as averages to rule out variations due to accounting periods, seasonal factors, and the periodic variations.

Special Reports and Analysis:

- In control, special reports & analysis help in particular problem areas. Routine accounting & statistical reports furnish a good share of necessary information, there are often areas in which they are inadequate. It may be that some of the funds spent for elaborate information programs could be more profitably spent for special analysis.

Operational Audit:

- It is the regular and independent appraisal by a staff of internal auditors, of the accounting, financial & other operations of an enterprise.

Although often limited to the auditing of accounts, in its most useful form operational auditing includes appraisal of operations in general, weighing actual results against planned ones.

- **Personal Observation:**

It is also called as “Managing by walking around” by some organizations.

Time-event Network Analysis:

- PERT – Program Evaluation & Review Technique.
- CPM – Critical Path Method.

Both are meant for planning and control of projects.

PERT is probabilistic & CPM is deterministic.

- GANTT Charts – show the time relationships between “events” of a production system.

Control of Overall Performance:

There are many reasons for control of overall performance.

- First, just as overall planning must apply to enterprise or major division goals, so must overall controls be applied.
- Secondly, decentralization of authority – especially in product or territorial division creates semi-independent units, and these must be subjected to overall controls to avoid the chaos of complete independence.

- Thirdly, overall controls permit measure of integrated area manager's total effort, rather than parts of it.

Overall controls are generally financial in nature.

Budget Summaries and reports:

- A widely used control of overall performance takes the form of summary of budgets.
- A **budget summary**, being a resume of all the individual budgets, reflects company plans so that sales volume, costs, profits, utilization of capital and return on investment may be seen in their proper relationships.

- In these terms it shows, top management how well the company as a whole is succeeding in meeting its objectives.
- For the best control through budget summary, a manager must first be satisfied that total budgets are an accurate and reasonably complete portrayal of the company's plans.
- Minor discrepancies should receive appropriately little attention. The purpose of a control system is to draw attention to important variations, and both the budget reports & the attention paid to them should reflect this.

- Managers should not under-estimate the value of the budget summaries in providing an effective means for overall control in situations of decentralized authority.
- Budget summaries furnish a means whereby enterprise objectives can be clearly & specifically defined & departmental plans can be made to contribute toward such objectives. The summaries hence, furnish a useful guide for **Corrective action.**

Profit and Loss Control:

- Since the survival of a business usually depends upon profits & since profits are a definite standard against which to measure success, many company's use the income statement for divisional & departmental control.
- Since income statement is a statement of all revenues and expenditures for a given time, it is a true summary of the results of business operations.
- P & L control, when applied to divisions/departments, is based on the premise that if it is the purpose of the entire business to make a profit, each part of the enterprise should contribute to this purpose.

- Hence, ability of a part to make an expected profit becomes standard for measuring its performance.
- In P & L control, each major department/division details its revenue & expenses – normally including a proportionate share of company overhead – and calculates periodically its profit/loss. Some units have their own accounting groups , in others, the statement is prepared by the central accounting department.
- P & L control usually is practicable only for major segments of a company, since the paperwork involved in building up P & L statements for smaller departments tend to be too heavy.

- Also P & L control usually implies that the managers of a division/department have fairly wide authority to run their part of the business as they see fit, with profit the primary standard of success.
- The more integrated & complete the organizational unit, the more accurate a measuring stick of P & L control can be. Hence it works best in product & territorial divisions.
- Companies organized on a functional basis do occasionally employ P & L control.
- In most instances, P & L control is not applied to central staff & service departments.

Limitations:

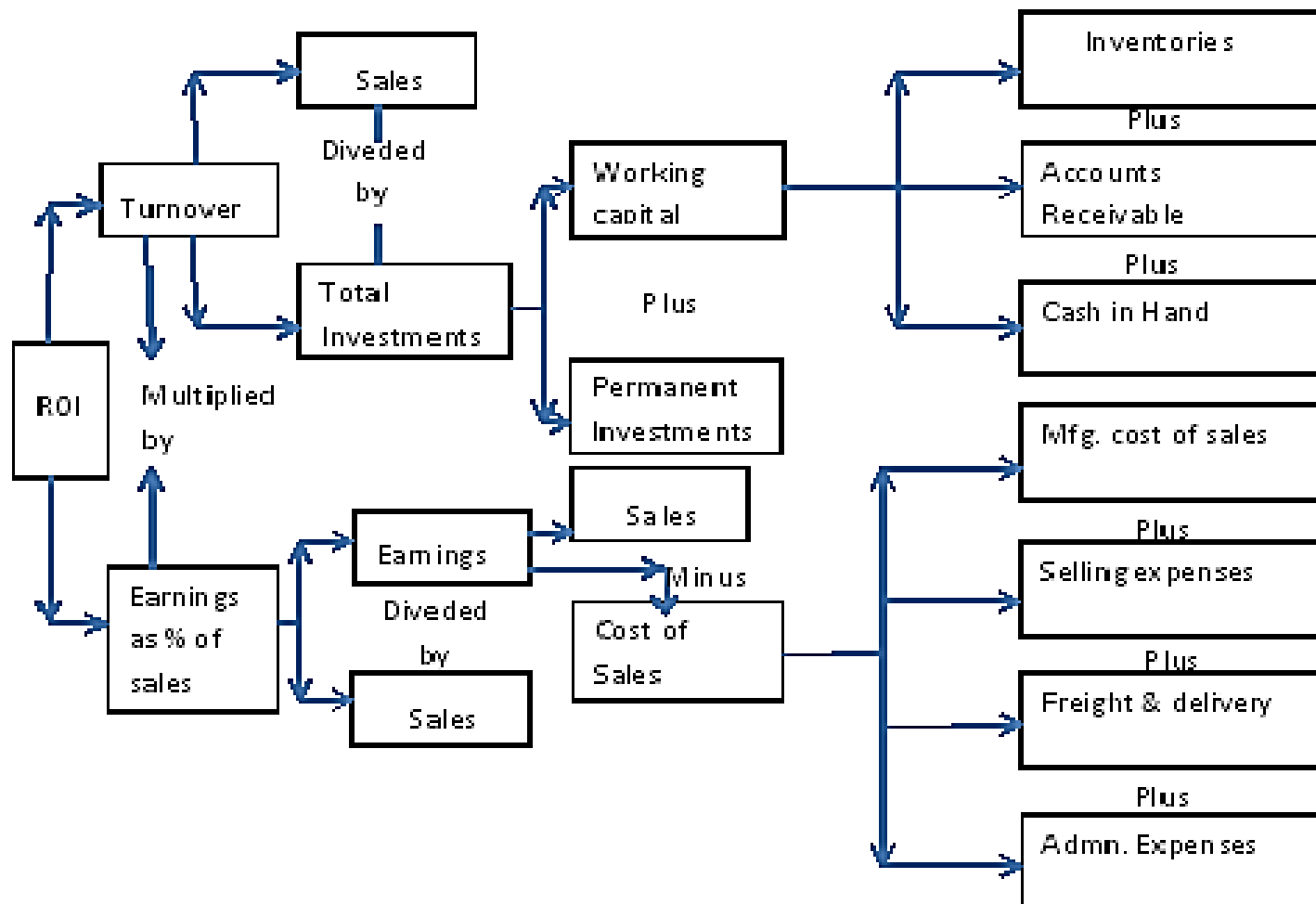
- High cost of accounting & paper transactions involving intra-company transfer of costs & revenues.
- Duplication of accounting records in several places.
- P & L control may be inadequate for overall performance.
- If it is carried very far in the organization, is that departments may come to compete with an aggressive detachment not helpful to enterprise coordination.

Return On Investment Control:

- ROI technique is used to measure both absolute and relative success of a company or a company unit by determining the ratio of earnings to investment of capital.
- This tool regards profit not as a absolute but as a return (generally %) on capital employed in the business.
- The goal of a business is seen, accordingly not necessarily as optimizing profits but as optimizing returns from capital devoted to business purposes.

- The ROI control is best summarized in the chart form shown in the next slide. Hence analysis of variations in rate of return leads to every financial aspect of the business.
- In any control through ROI, the number of ratios and comparisons behind the yardstick figure can not be overlooked. Although, improvement of rate of return can come from higher % of profit to sales, improvement may also come from increasing the rate of turnover by lower price & reducing return on sales.

Factors influencing ROI Control



Advantages of ROI Control:

- Like P & L control, it focuses managerial attention on the central/core objective of the business – making the best possible profit on the capital available.
- It is very effective where the authority is decentralized. It is not only an absolute guide to capital efficiency, but also offers possibility of comparing efficiency in the use of capital within the company and with other enterprises also.
- If the ROI control is complete and shows all the factors affecting the return, then it enables managers to locate the weaknesses. Ex: If inventories are rising, the rate of return will be affected.

Limitations of ROI Control:

- This method of control is not foolproof. Major difficulties involve availability of information on sales, costs and assets & proper allocation of investments and return for commonly sold or produced items.
- What constitutes a reasonable return? Comparisons of rate of return are hardly enough, because they do not tell the top managers, what the rate of return should be?
- Over emphasis on the rate of return may lead to undesirable inflexibility (or rigidity) in investing capital for new ventures.

- Greater danger in ROI control, is that it can lead to excessive pre-occupation with financial factors within the firm or the industry. Undue attention on ratios and financial factors may lead to overlooking environmental factors such as social and technical developments.