

Module 2

Chapter 3: Organizing and Staffing

Nature and Purpose of Organization:

- Organizing is the second basic function of manager amongst the 5 functions identified by Fayol, namely planning, organizing, commanding, coordinating, and controlling.
- Organising is the function of management which involves arranging human and other resources for the achievement of goals.
- Organization is a group of individuals with a common goal, bound together by a set of authority-responsibility relationships.
- Barnad introduce the formal and informal aspects of the organization.

- The term formal implies, this form of organization is formally created by assigning responsibilities to individuals along with commensurate authority.
- Informal organization always exist within the formal organization whereby individuals are associated with each other due to human bonding.
- In other words, informal organizations are necessary to the operation of formal organizations as a means of communication, of cohesion, and of protecting the integrity of an individual.

Difference between formal and informal

Formal Organization	Informal Organization
Mandatory Participation	Social group voluntary membership
Driven by authority	Driven by personal influence and group cohesion
Represented by formal hierarchical structure with superior-subordinate relationships	Represented by a small group of friends or associates
Job description for each member	No specific job profile for a member
Performance appraisal at regular intervals	Co-member subjective evaluation
Formal communication	Social interaction and teamwork
Policies	Grapevine
Chain of command	Group culture and traditions
Control exercised through supervision	Control happens through peer pressure
Organisational objectives are at the core	Group objectives are at the core

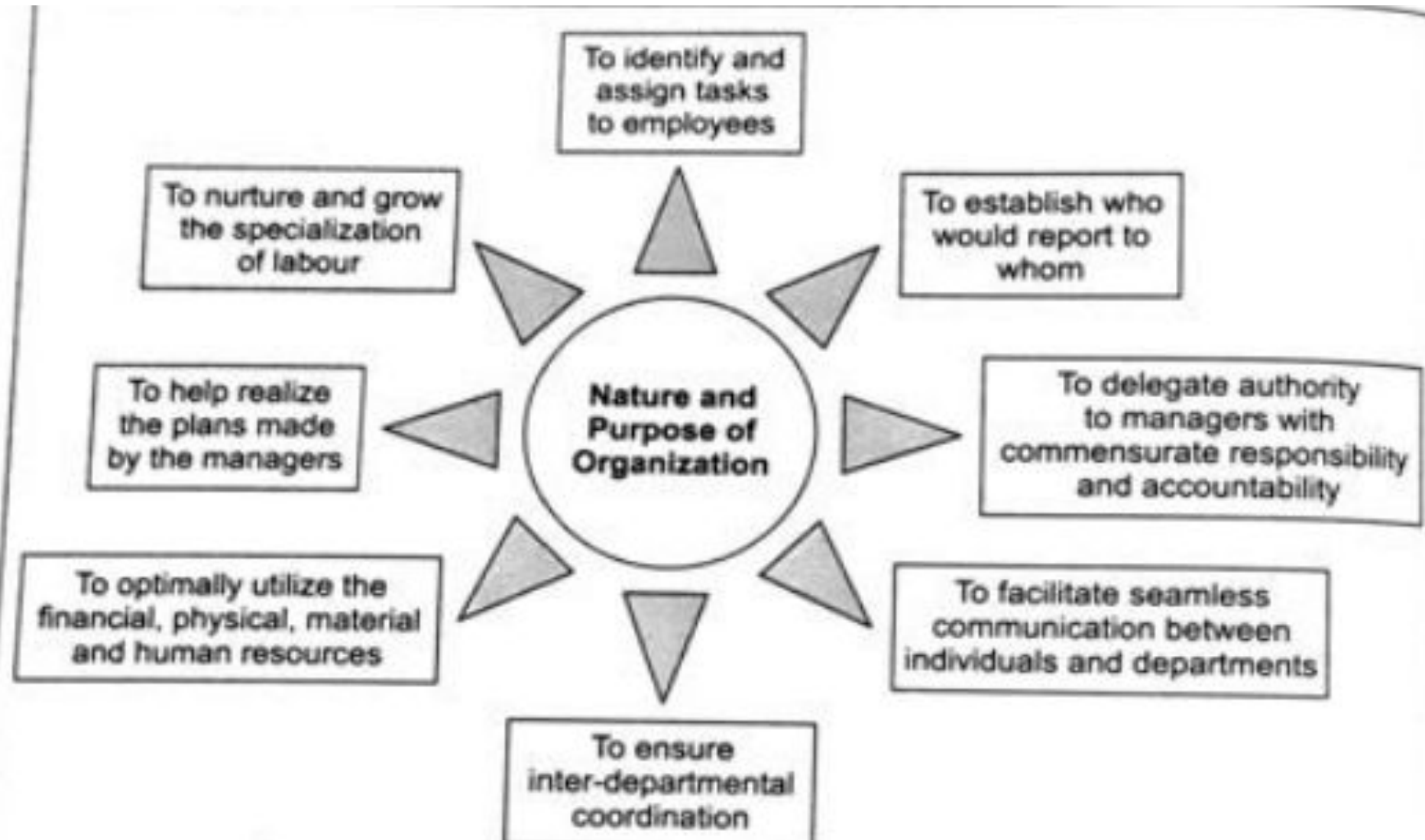


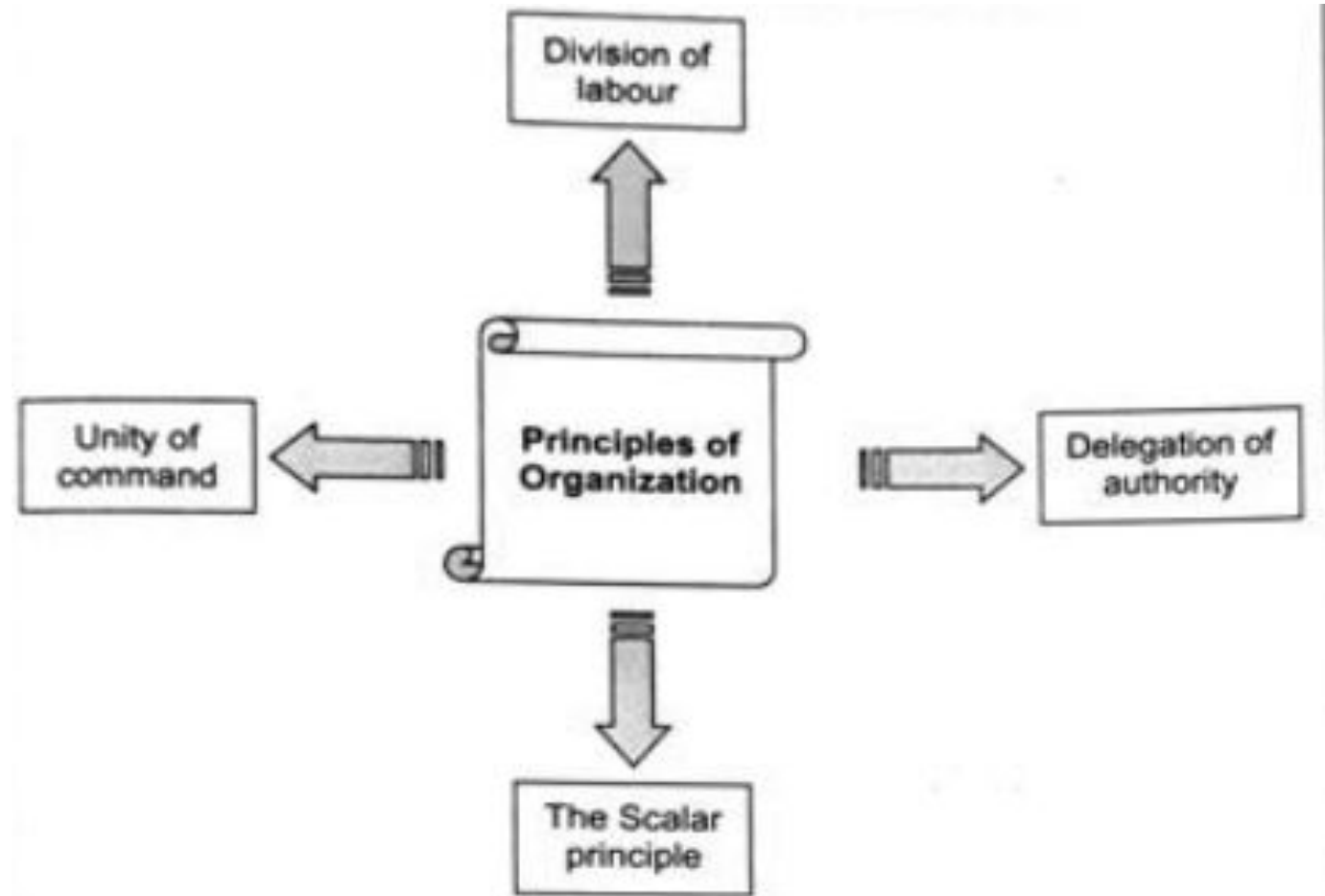
Figure: Nature and purpose of organization

- The figure shows the nature and purpose of organization.
- Organization helps in identifying various tasks to be performed for the achievement of organizational goals and assign them to individuals to perform.
- It also clearly establishes the reporting responsibilities, i.e. who report to whom.
- It delegates authority to the managers with commensurate responsibility and accountability for the discharge of their duties.
- It facilitates seamless communication between one individual and the other, and similarly, between any two departments.
- It ensures that any two departments coordinate well with each other in the achievement of organizational goals.

- It aids and optimal utilization of financial, physical(like land, buildings, machinery and equipment), material and human resources.
- By virtue of planning superseding organizing, organization helps in the realization of plans made by managers.
- It also helps in nurturing and growing the special skills and talents of the employee by the virtue of the *division of labour* (or *specialization of labour*).

Principles of Organization:

- The four key principles of organizations are:
 1. Division of labour
 2. Delegation of authority
 3. The scalar principle
 4. Unity of command



1. Division of labour:

- Division of labour also called the *principle of specialization* was first highlighted by Plato in 350 BC when he compared the workmanship of people in small cities with their counterparts in big cities.
- The application of division of labour principle can be found in contemporary organizations.
- The assembly lines in automotive manufacturing have workstations in a sequence and on each workstation, a worker performs highly specialised task.
- At Hero Honda Motors Ltd factories, a mobike comes off the assembly line in every 18 seconds. Naturally, it would not be feasible for any single person to assemble a mobike in just 18 seconds. This signifies the power of the division of labour (also call division of work).

- This principle of specialisation as major advantages in the form of increased productivity and decreased per unit cost of production for products having less variety.
- However, it has disadvantages like monotony on path of workers who feel bored of doing the same task over and over again.
- This anomaly can be overcome by job rotation of workers (e.g. assigning them to different workstations after every few months) and by job enrichment (e.g. by adding some supervisory duties to the task set of a worker).

2. Delegation of authority:

- Authority refers to the rights inherent in a managerial position to give orders and expect the orders to be obeyed.
- Delegation of authority is the process by which managers allocate authority downward to the people who report to them.
- Delegation of authority should be accompanied with responsibility and accountability on the part of the manager to whom the authority has been delegated.
- The manager should feel responsible or obliged to perform the duties assigned to him while using the authority vested in him.
- Similarly, the manager should be made accountable for the resources consumed by him in their discharge of duties.
- When authority is suitably delegated, it leads to empowerment, and that the people have the freedom to contribute ideas and perform their jobs in the best possible ways.

3. The scalar principle:

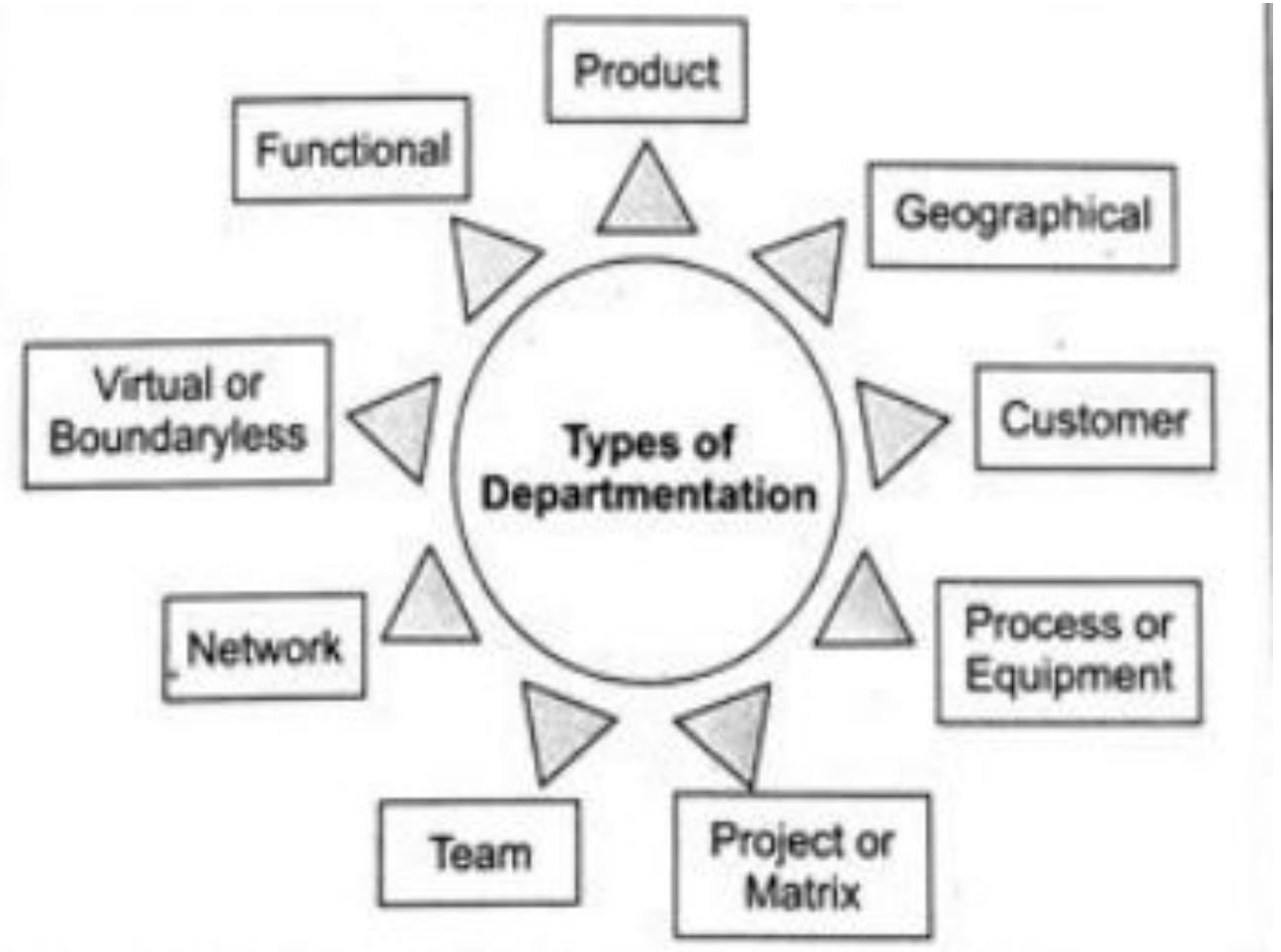
- The scalar principle states that there should be a clear and unbroken chain of command or line of authority from the top level of hierarchy to the lowest level by including all intermediate levels.
- If deprived of such an unbroken chain of command, the benefits of delegation would not be reaped to the fullest possible extent by the organization.
- Schermerhorn contends that higher the number of levels in the hierarchy of the organization, the overhead costs increase, the communication flow slows down, decision-making becomes late and worst of all, the organization may lose contact with the customer.
- Therefore, a shorter chain of command is preferable by way of lesser number of hierarchy levels in the organization.

4. Unity of command:

- Unity of command is another classical management principle which recommends that every individual in the organization should report to a single boss.
- This is necessary to avoid confusion on part of the individual he or she receives direction and orders from more than one supervisors.
- The situation may get even more complicated if the individual receives instructions from his or her boss and also from the boss's boss.
- In contemporary organizations, there is relatively less unity of command due to cross functional teams, matrix organization structures, etc.
- There are other benefits in such cases which offset against the confusion resulting due to lesser or lack of unity of command and such scenarios.

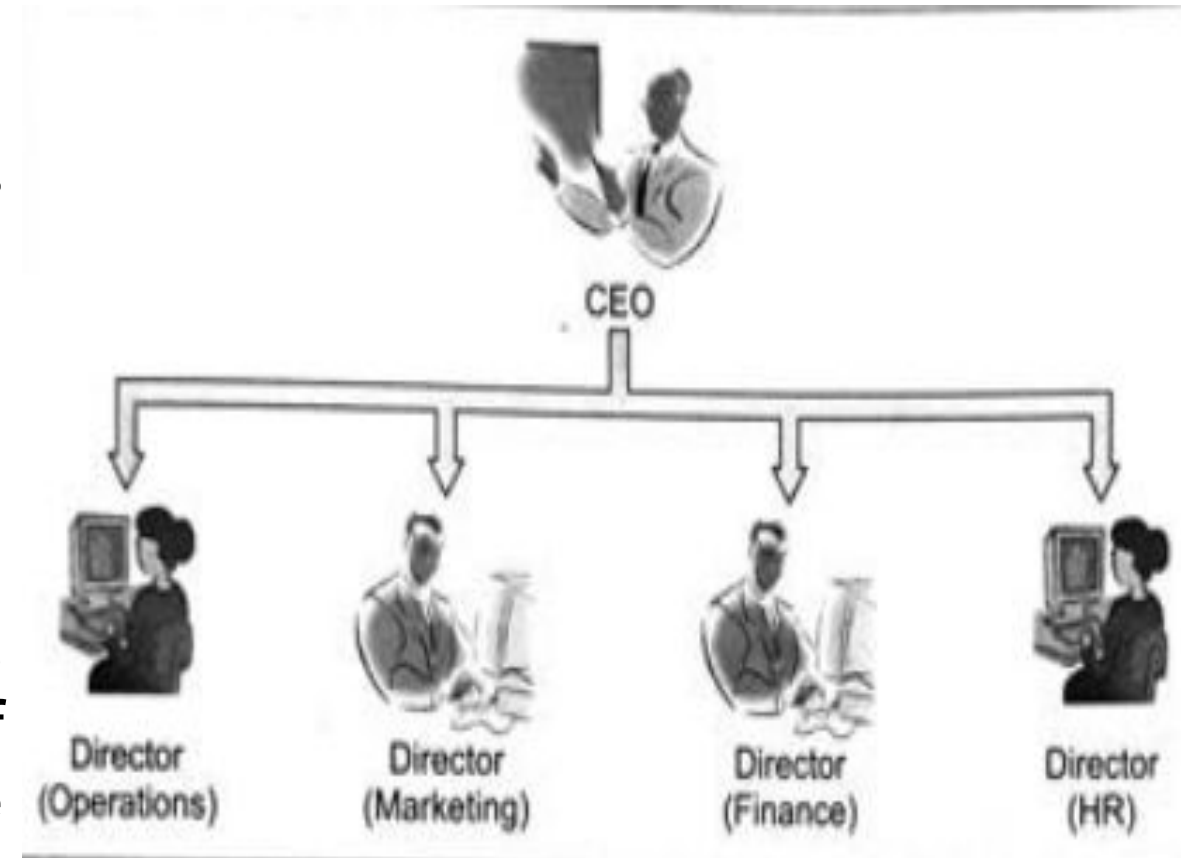
Types of Organization Departmentation:

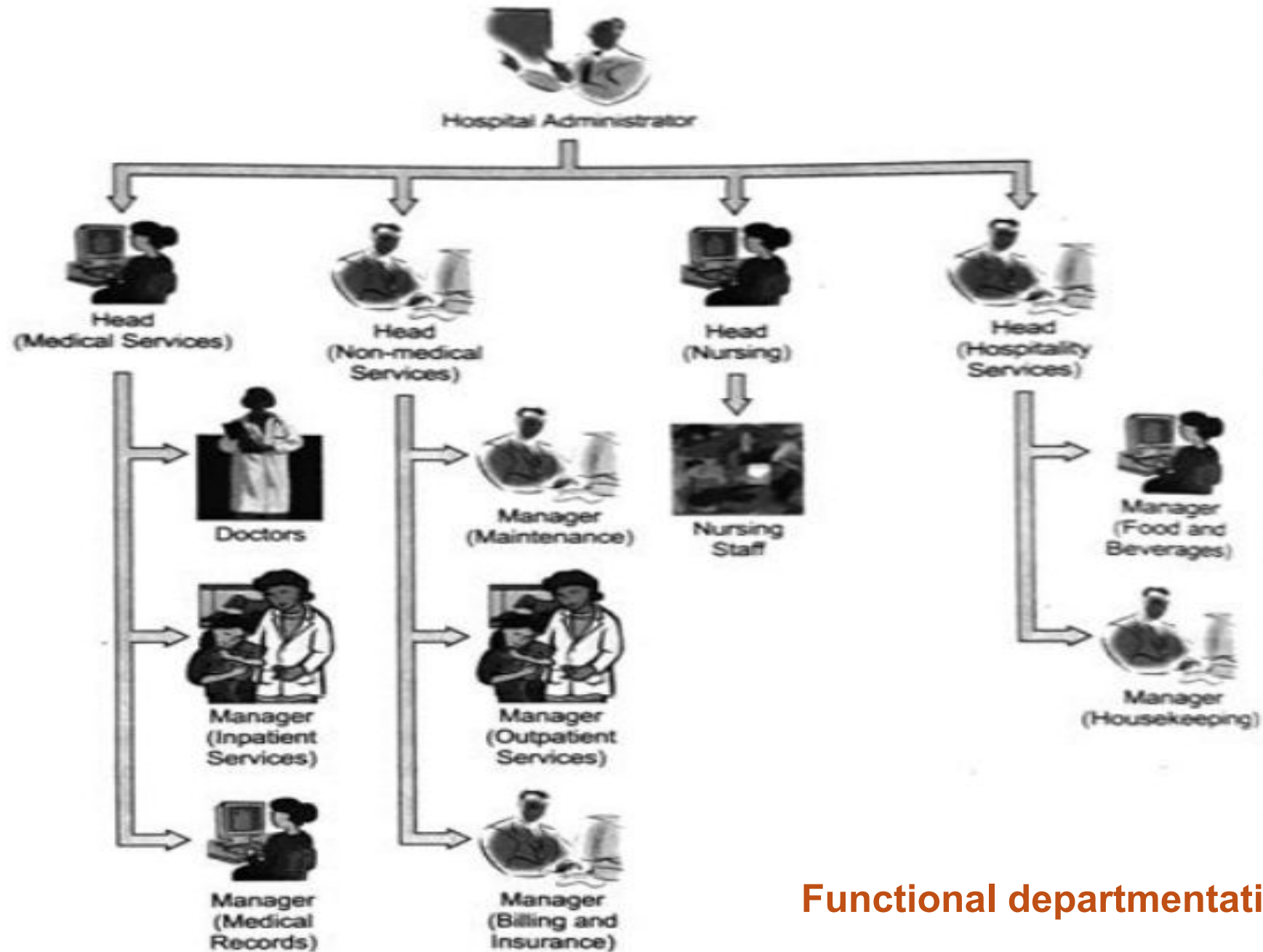
- Departmentation is the way in which an organization groups its various activities.
- There are many ways in which organizations can be departmentalized.



1. Functional Departmentation:

- In this form of departmentation, similar activities are functional areas are grouped together.
- **Advantage:** principle of specialization is utilised to bring about efficiency in the organization.
- **Drawback:** complete focus upon functional areas at lower level of the hierarchy leaves the responsibility of the overall performance of the organization on the higher level.





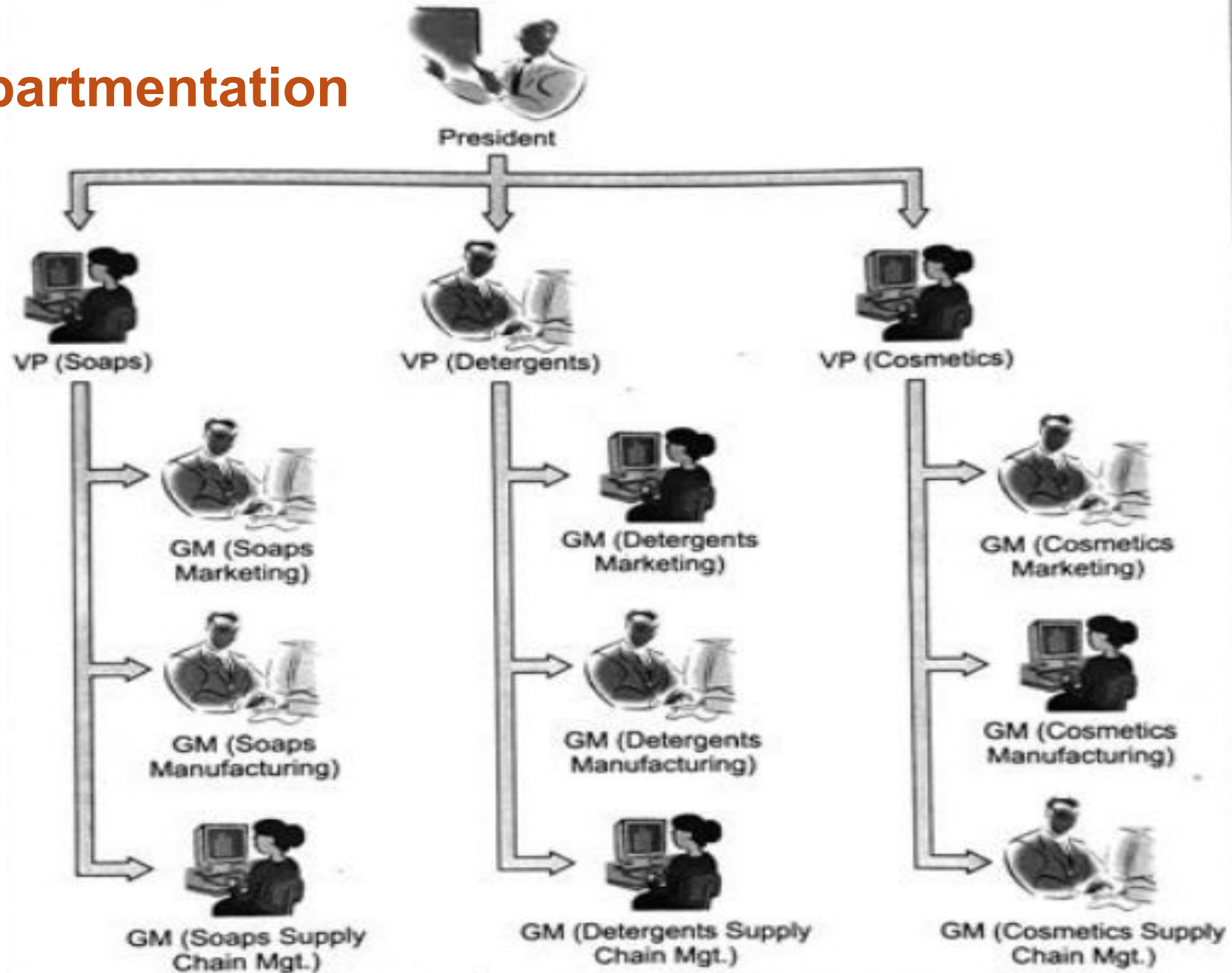
Functional departmentation in a hospital

- The functional areas of departmentation in a hospital are medical services, non-medical services, nursing and hospitality services.
- The head of medical services oversees the doctors, manager(in patient services) and manager(medical records).
- The head of non-medical services is reported by manager(maintenance), manager(outpatient services) and manager(billing and insurance).
- All the nurses report to the head(nursing).
- The head of hospitality services has manager(food and beverages) and manager(housekeeping) under him.

2. Product Departmentation:

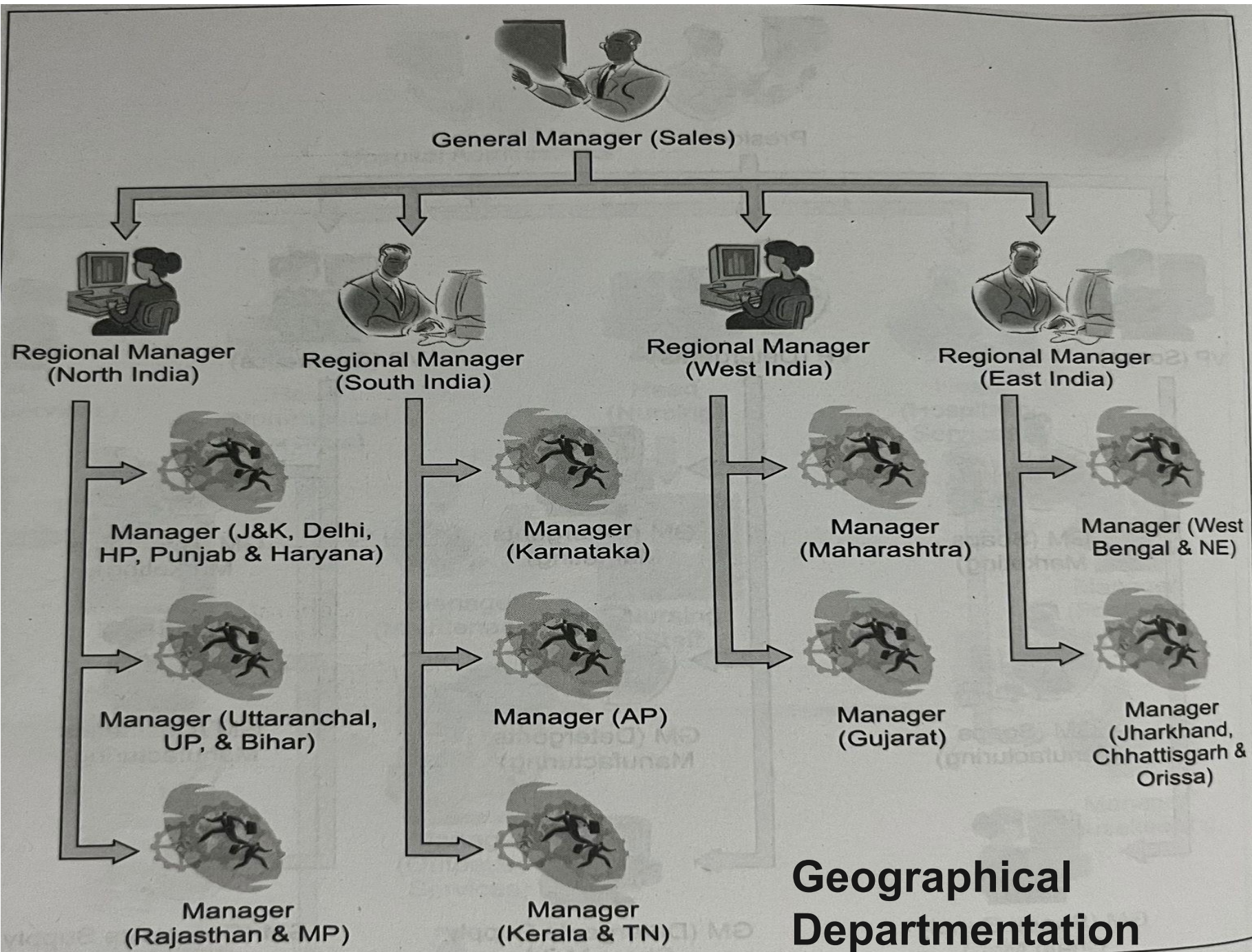
- An organization which is into manufacturing many products may find the functional departmentation too slow to respond to the market changes for various products.
- **Advantage:** the managers responsible for their products get the opportunity of managing all the facet and functional areas.
- Later, it becomes easier for them to don the role of the organizational head, as they have experience of managing complete entities rather than only a functional area.
- **Disadvantage:** duplication of resources in various product division.

Product Departmentation



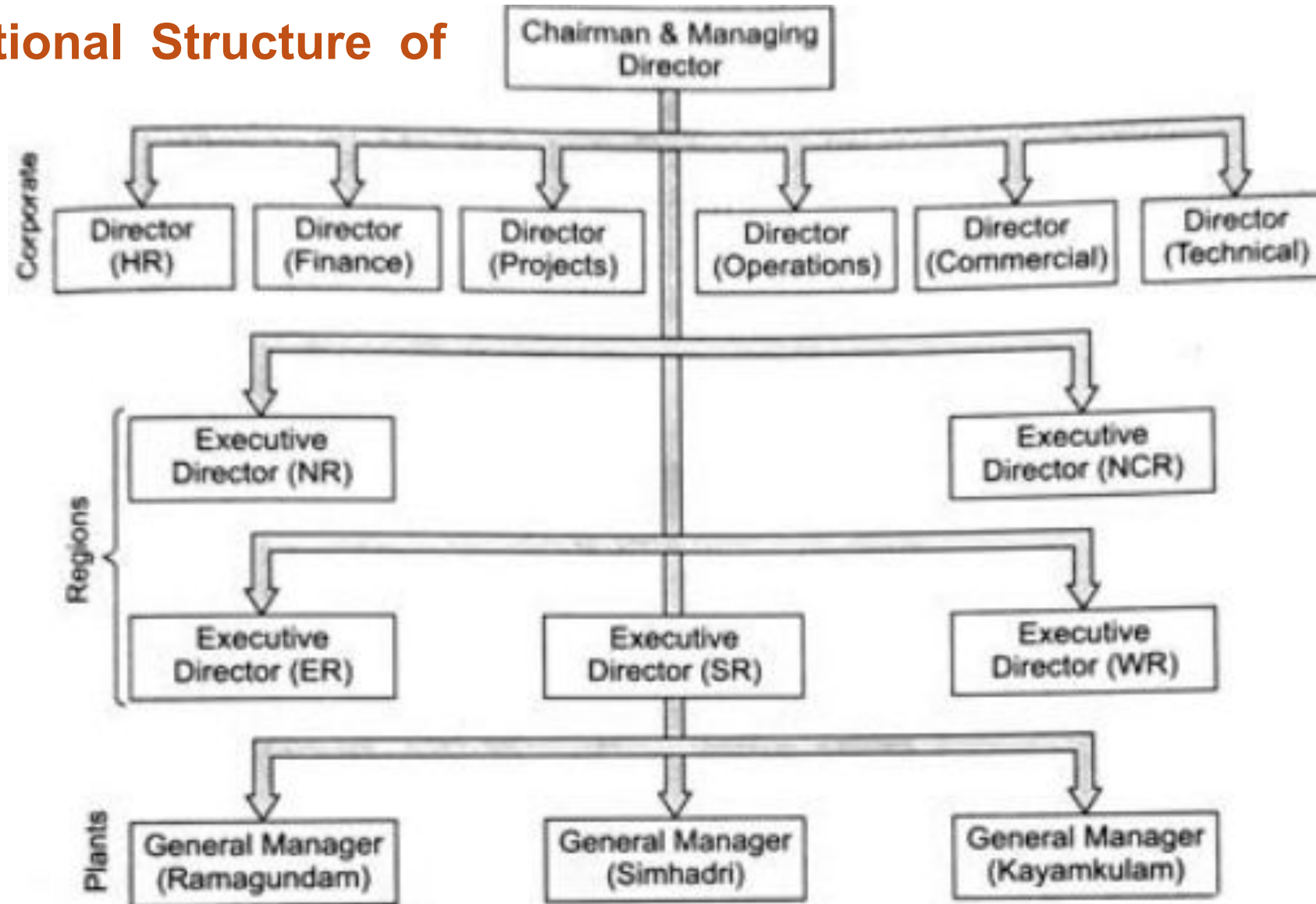
3. Geographical Departmentation:

- It is the grouping of the organization according to the territorial areas, nationally or internationally.
- This kind of departmentation is suitable for organization operating in various markets scattered geographically.
- **Advantage:** managers can focus upon the unique requirements of their region.
- **Drawback:** the top management to coordinate and control the managers in geographically dispersed regions.



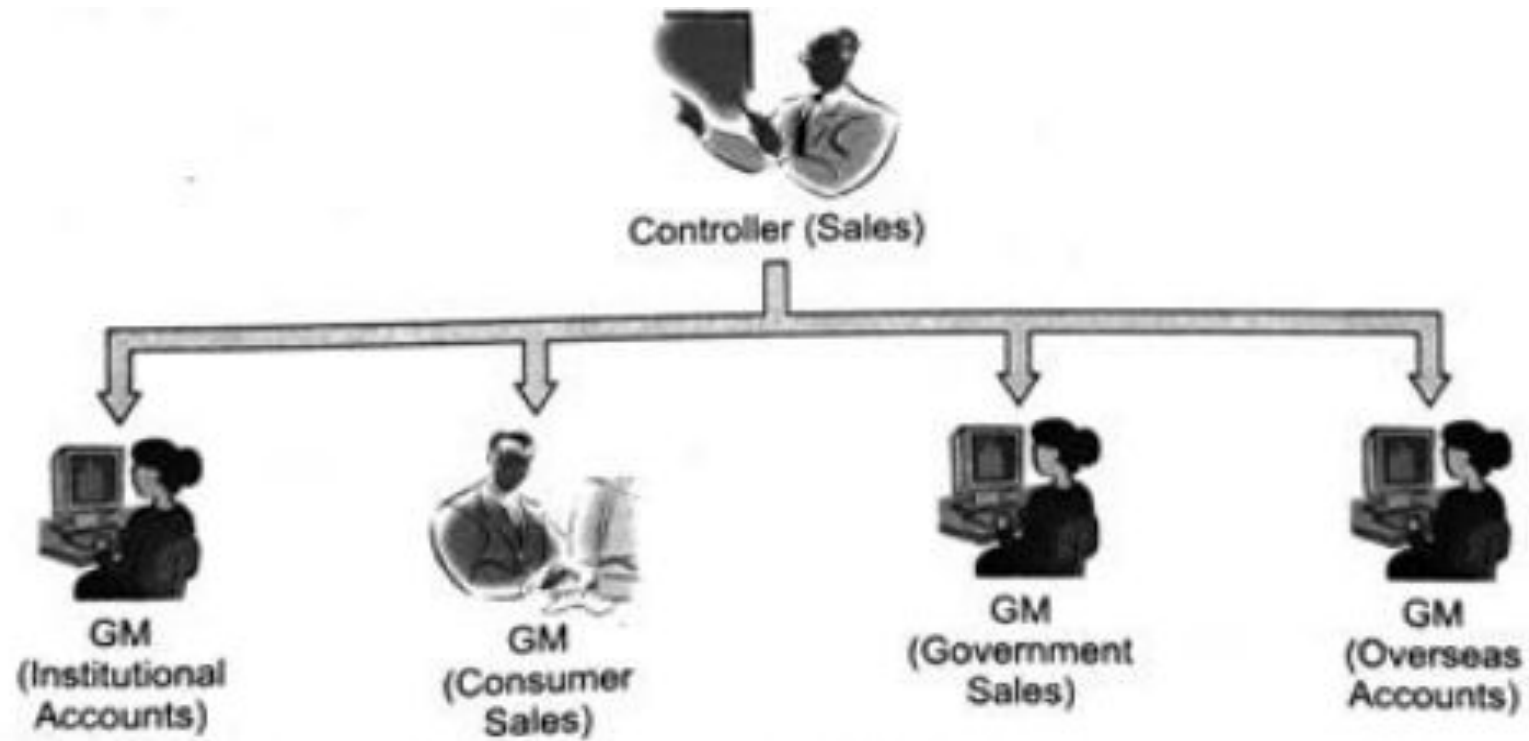
**Geographical
Departmentation**

Organizational Structure of NTPC



4. Customer Departmentation:

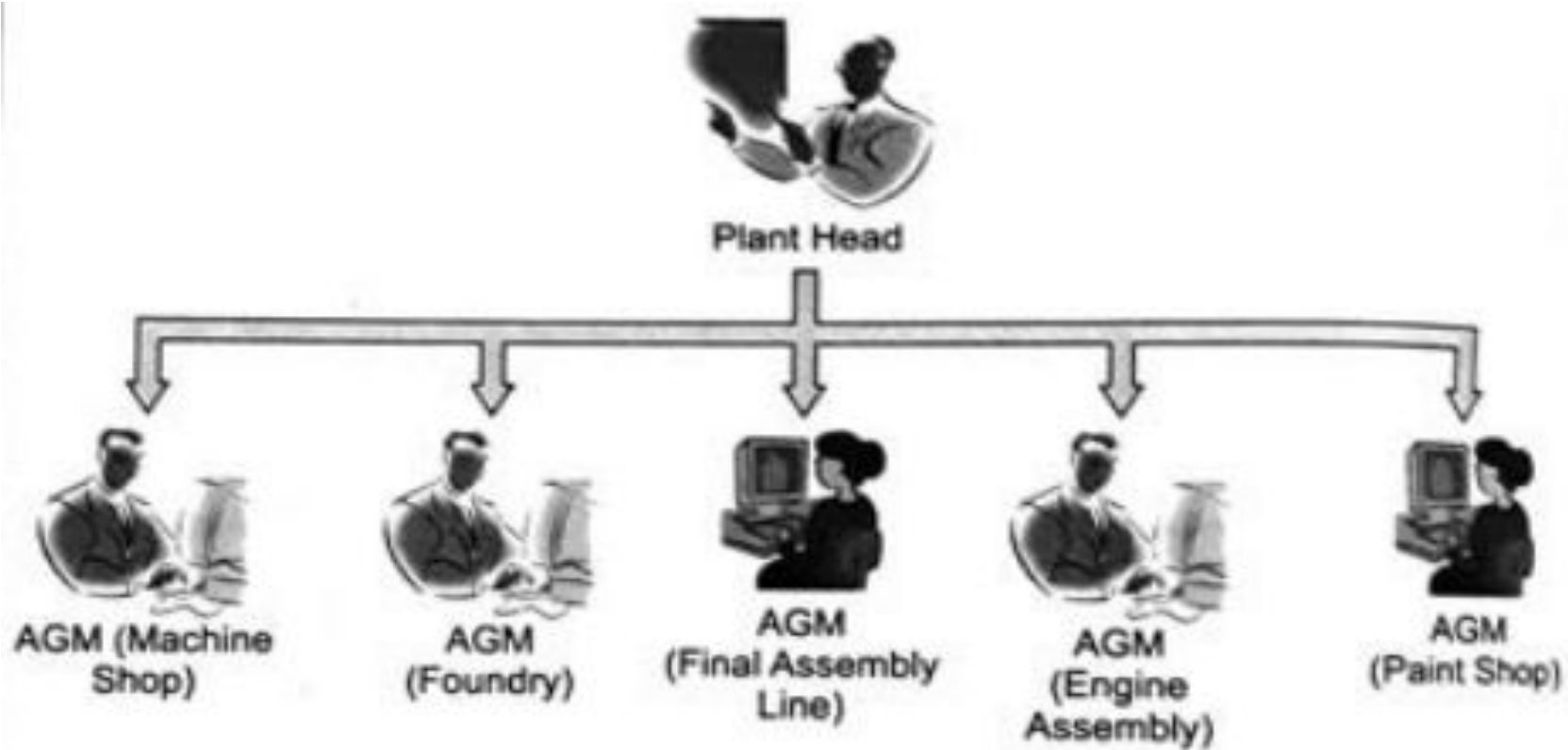
- As the name implies this departmentation focused upon the customer.
- Here, managers are assigned different types of customers to service.
- **Advantage:** the managers are able to address their customers' needs promptly and as per their unique requirements, while building long term relations with them.
- **Drawback:** under-utilization or duplication of resources for various types of customer divisions.



Customer departmentation

5. Process or Equipment Departmentation:

- Process or equipment departmentation is found in manufacturing organizations in which parts of the production process are segregated to improve efficiency in the system.
- This kind of departmentation can be done on the basis of equipment types as well. For example, welding, drilling, lathe machining, etc.
- Such departmentation is equally useful when the variety of products manufactured in the plant is very large.
- **Advantage:** the manufacturing cells containing different machines organised in the processing sequence of a product group have been found to be more efficient.
- **Disadvantage:** when the variety of products produced is relatively less and the products can be grouped into similar processing requirements and sequence.

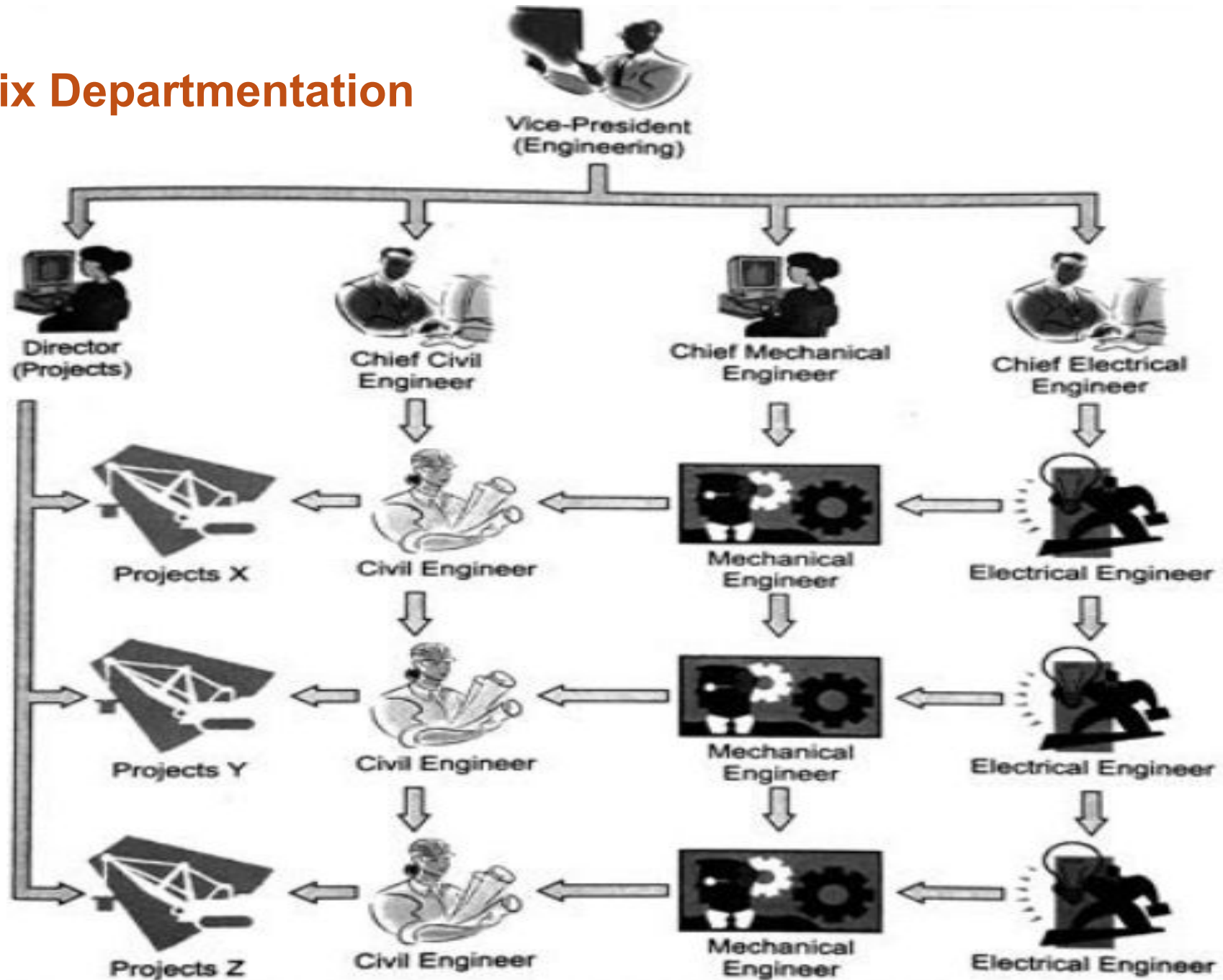


Process or Equipment Departmentation

6. Project or Matrix Departmentation:

- This is a form of hybrid departmentation in which any 2 types of departmentation are conjoined to address a unique requirement.
- Example, functional departmentation can be conjoined with product departmentation, whereby personnel from different functional areas like mechanical engineering, electrical engineering, civil engineering, etc. assigned to projects.
- **Advantage:** congregation of people with varied expertise in the project team to facilitate the cause of the project within a specified time frame.
- **Disadvantage:** difficulty and control mechanisms and performance appraisals due to dual reporting of such employees.

Project or Matrix Departmentation



- The personnel are either assigned to the projects on a full time or part time basis depending upon the extent of their involvement or requirement in the projects.
- During the period of their involvement in the projects, such employees are dual reporting-to their functional head and the project head.
- The extent of authority vested in the project head on such personnel deputed from functional departments can vary on a case to case basis.
- After the culmination of the project, such personnel are sent back to their respective departments to perform their routine duties.

7. Team Structures:

- In contemporary organizations, informal and formal teams have become commonplace.
- The phenomenon of quality circles and TPM (Total Productive Maintenance) circles were instrumental in the creation of informal voluntary teams of workers in the organization during the 1980s and 1990s.
- These teams were formed voluntarily by workers to find workable solutions to problems faced in their work domains or machinery to find better ways of doing things.

- **Concurrent engineering:** it is a product design approach in which the design team includes personnel from the marketing department, engineering department, production department, materials department, and finance department in addition to the design department. Thus, concurrent engineering involves a team structure.
- This approach is radically opposite to the classical sequential product design approach in which design process takes place in stages moving from one department to another.
- Thus, the interdepartmental concurrent engineering teams save a lot of time and effort unlike the sequential approach in which feedbacks between departments, at times leading to rejection of the suggested designs at later stage, results in investigation of a lot of time and effort.

8. Network Structures:

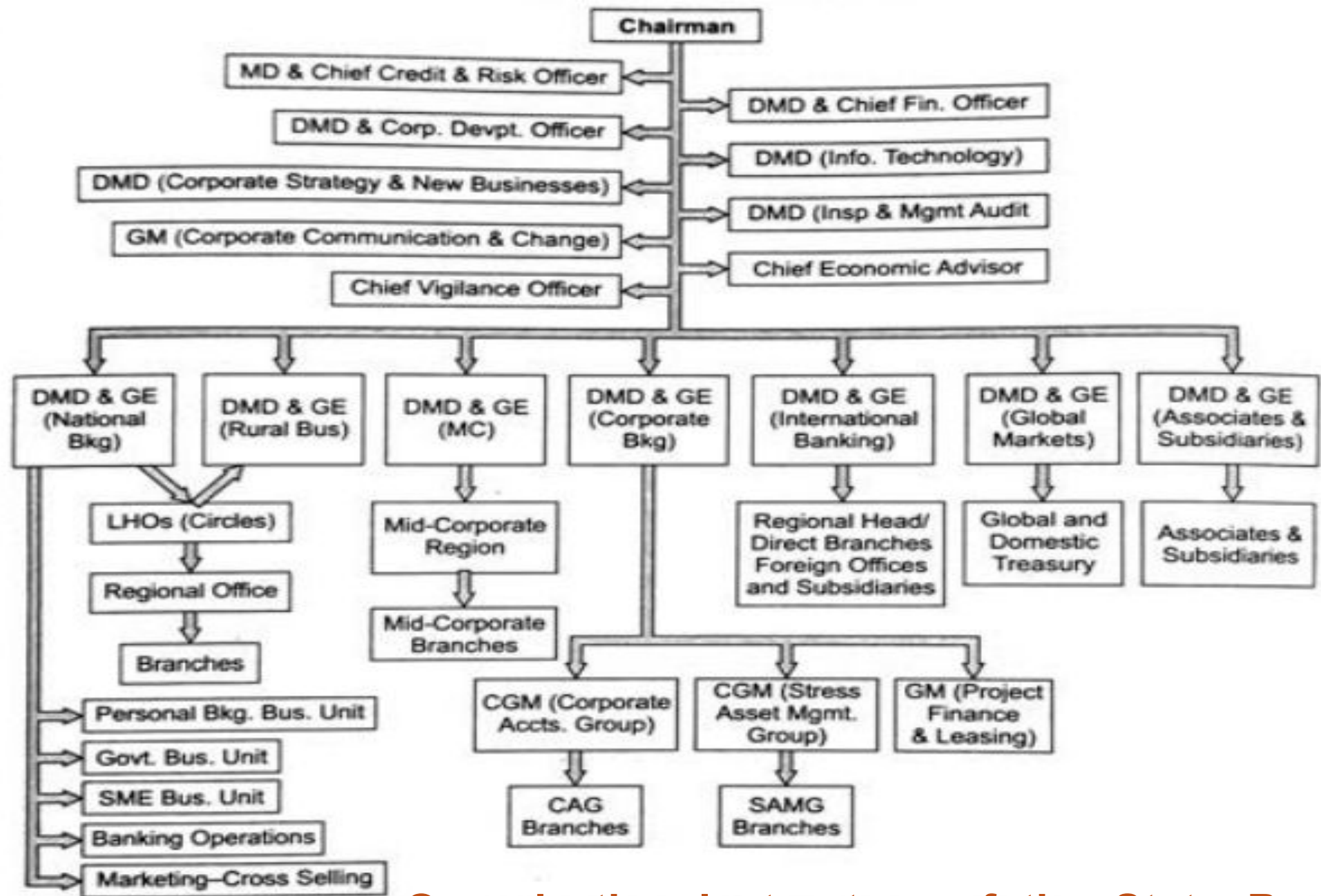
- Network structures are relatively a new phenomenon whereby organizations have started making alliances and collaborations with their vendors, but extend beyond the conventional supplier-manufacturer relationships.
- The trust and confidence exhibited by organization in treating their vendors as close partners has been the hallmark of recent times.
- Example: Scorpio SUV, Mahindra and Mahindra as broken the unspoken rule that says automakers must design, engineer, and test their own vehicles while spending hundreds of millions of dollars in the process.
- Along the way, they can divvy up contracts to suppliers we will build the components for them.

- Mahindra, tried something suppliers had been suggesting for years.
- The company built a brand-new vehicle with virtually 100 percent supplier environment from concept to reality for \$120 million, including improvements to the plant.
- The new Mahindra Scorpio SUV add all of its major systems design directly by suppliers with the only input from Mahindra being performance specification and program cost.
- Design and engineering of systems was done by suppliers, as was testing, validation, and materials selection.
- Sourcing and engineering locations were also chosen by suppliers.

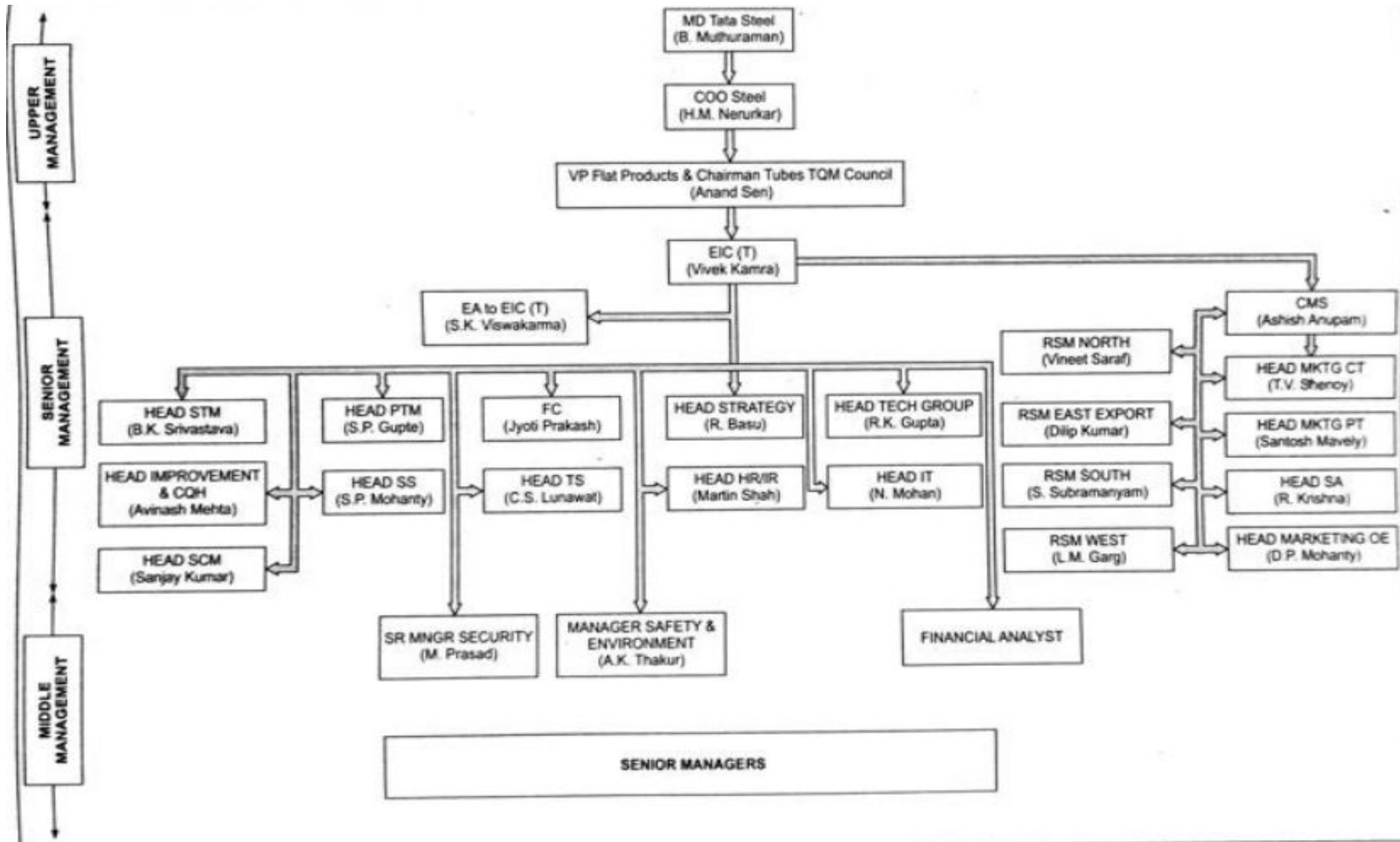
9. Boundaryless Organization:

- Leading-edge web-based technologies have brought radically new organization structures called virtual or boundaryless into existence.
- Example: “Wikipedia”, which has become the world's biggest online encyclopaedia just within a short time span after its launch on Jan 15th 2001.
- This Wiki technology has allowed the updating of the Wikipedia content by anybody across the globe at any point in time.
- The whole content has been added by volunteers, who also act as watchdogs and promptly eliminate any discrepancies on the pages of their interest and Wikipedia.

- Wikipedia as content on virtually any topic and has been the most popular source of ready to use information.
- Wikipedia is written collaboratively by volunteers from all around the world; anyone can edit it.
- Wikipedia has grown rapidly into one of the largest reference websites attracting millions of visitors.
- Wikimania is a conference for users of the wiki projects operated by the Wikimedia Foundation.
- Another example, the organizational structure of the State Bank of India.



Organizational structure of the State Bank of India

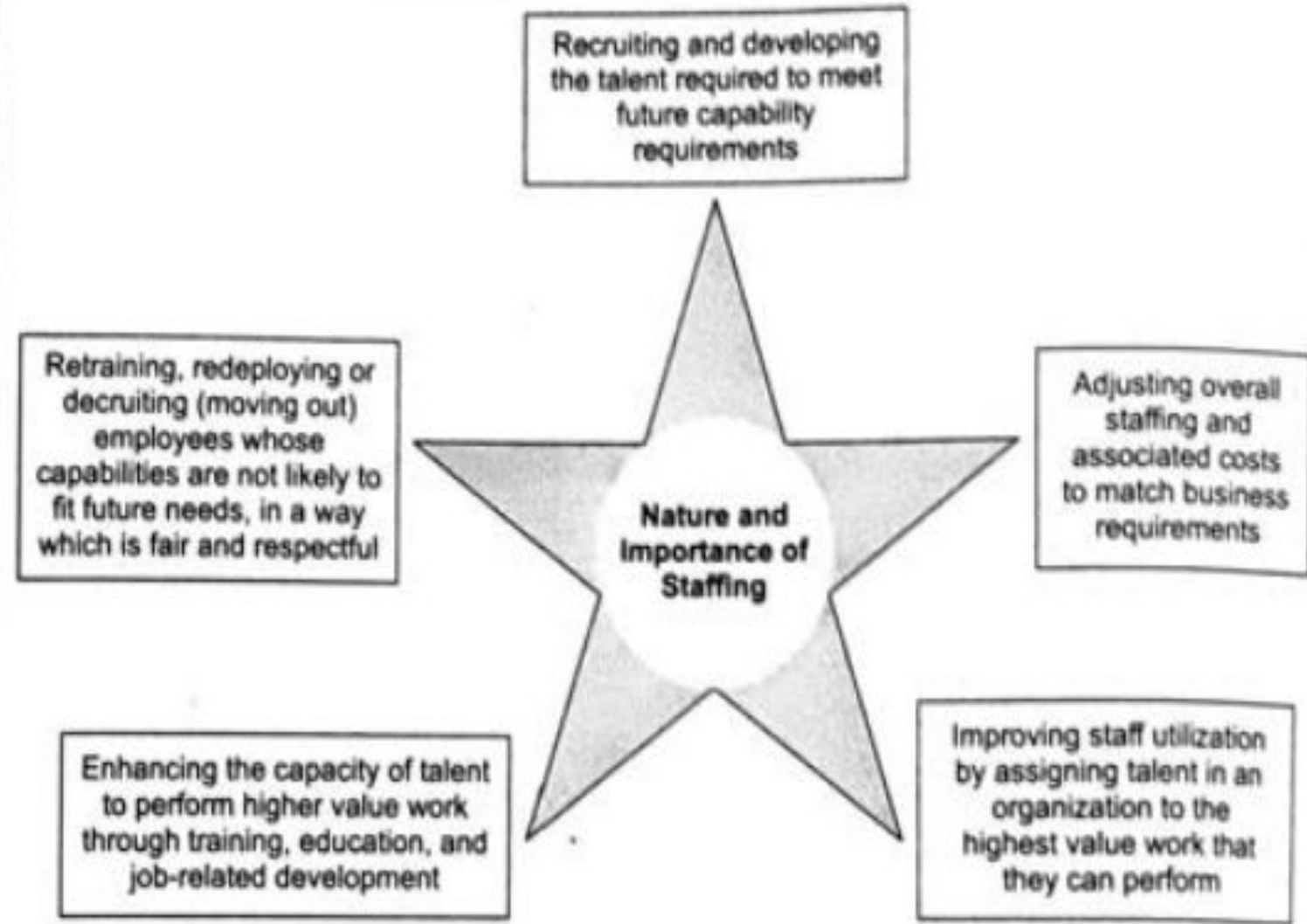


Organizational structure of Tubes SBU of Tata Steel

Nature and Importance of Staffing:

- A capable and efficient workforce is crucial for the success of an organization.
- The process of recruiting, retaining, developing, and nurturing the workforce is called **staffing**.
- The staffing function in an organization as to recruit people with suitable qualifications, knowledge, and skills as per the current requirements of the organization.
- The workforce size may need to be increased at some point in time, while it may require curtailment at other times, in view of the overall business strategy.
- It requires hiring and firing of employees, which involves a lot of effort on part of the staffing personnel.

- Bechet and Walker stress upon the importance of aligning staffing with business strategies and providing staffing actions crucial in this vein.
- These staffing actions highlights the nature and importance of staffing.



- Providing challenging and value adding assignments to the existing talent in the organization helps in keeping them motivated and interested, while ensuring that the human resources are optimally utilised for the most value adding activities for the organization.
- This requires meticulous performance appraisals of employees with well thought of promotion procedures and career planning for employees.
- Training, education and job-related development not only help in retaining the employees, but also an enhancing their capabilities and capacities to work smartly and to be more productive for the organization.
- It is natural that over the period of time, some employee's skills may need upgradation through re-training.

- Some employees may need to be shifted to other departments where their experience and skill may be utilized, while some others may have to be laid-off in a respectful manner, e.g. by way of voluntary retirement.
- It is evident that these varied actions required on part of the staffing function make it one of the most important functions in the organization.

Process of Selection and Recruitment:

- **Recruitment** is a set of activities viz. advertising, establishing preliminary contacts and performing initial screening to create a qualified pool of job applicants for an organization.
- **Selection** involves choosing from a pool of applicants (created by the recruitment process) the person or persons who offer the greatest performance potential.

Difference between Recruitment and Selection

Recruitment	Selection
Recruitment process precedes the selection process	Selection process succeeds the recruitment process
It has a positive connotation due to encouragement given to potential applicants to apply for a job	It has a negative connotation due to rejection of unsuitable candidates applied for the job
Its basic purpose is to create a pool of qualified human resources	Its basic purpose is to “choose” the best persons from the pool to fill the vacant positions
It does not result in any contract between the applicants and the organization	It results in a job contract between the selected applicants and the organization employing them

- It is quite challenging task to find the right person to perform a job in an organization.
- A cashier approach to selection and equipment may result in problems of various sorts for the organization as well as the appointees.
- A proper matchmaking is required to ensure that the person being recruited for a particular position has the necessary skill,s knowledge, and aptitude to perform the job.
- The figure shows a typical process of selection and recruitment.

1. Temporary or permanent employee?

- The first step in the selection and recruitment process is to determine if the job should be filled by employing a temporary or a permanent employee.
- When an employee suddenly exits from the organization leaving behind a vacancy to be filled urgently, it is worthwhile and most instances to find a temporary employee to fill the post to allow for suitable time frame for formal selection and recruitment of a permanent employee.
- In other scenarios, a particular job may be seasonal in nature and thus, temporary employees would be more suitable for such a job.

- Example: retail stores usually increase the number of employees during the festival season.
- It is generally easier to handle temporary employment as these are short term contacts and the employee knows from the beginning that the employment will lapse after the term gets completed.
- Advantage: temporary employment gives the opportunity to the employee to demonstrate his capabilities to the employer and also to learn the skills typical of the organization.
- Later, if the need be, the employer may consider the temporary employee for permanent employment.

2. Perform Job analysis and create job description:

- Successful employee selection is dependent on a clear understanding of job's components.
- A job analysis is used to identify job tasks and responsibilities.
- This may be accomplished by collecting information about the position; by interviewing workers, supervisors, and other employers; and by observing current employees.
- The end result of job analysis is the job description and specifications.

- Example: A job description and specification at pharmaceutical major Novartis
- General:
 - Job title: Program Director
 - Department: Human Resources
 - Reports to: Head of Learning
- Job purpose: The Program Director designs and delivers learning program that will enhance the skills and capabilities of Novartis' current and future leaders around the world. These programs are designed in close cooperation with and sponsored by the members of the executive committee. This position reports to the ad of planning and has based in Novartis Worldwide headquarters in Basel, Switzerland.

- **Major Accountabilities:**

- Serves as an expert for the design, development, implementation, and ongoing updates of specific learning programs and close contact with the Head of Learning.
- Is the first point of contact for the business partners and identifies the development needs
- Deals directly with all potential vendors in the design and development phase
- Is personally present in key learning programs, deals with internal senior faculty and senior Business School, consultancy representatives
- Contributes to the overall learning strategy of the company

- **Key performance indicators:**
 - Feedback/Ratings on specific programs
 - Favourable feedback from senior management partners
- **Job dimensions:**
 - Number of associates: administrative support depends on scope
 - Financial responsibility: 5-10 Mio CHF
 - Impact on the organization: learning programs regarded as an essential part of people development, I impact on the job performance
- **Background-education and experience**
 - University degree with the preference for MBA
 - Strong business acumen
 - Excellent people and communication skills
 - 6-10 years experience in an internationally operating company

3. Determine the Recruitment strategy:

- The next step involves reaching out to the intended audience with the information that the vacancy exists for a particular position in the company.
- The objective here is to add as many applicants as possible for the vacancy so that the employer gets ample choice to find the best candidate for the job.
- Ways to advertise the position include: company website, present employees, previous applicants, trade journals, newspapers, vocational schools, universities, and employment agencies.
- Many times, people come looking for work when there is no vacancy existing in the organization at that point in time. It is a good idea to meet the firm up a sample form so that they may be contacted when there is a relevant opening. Such a database is very handy for expanding the applicant pool for a job vacancy in the due course.

4. Determine the selection tools to be used and the sequence thereof:

- There are various tools to check the abilities, knowledge, and skills of the applicants.
- Example: preliminary screening(group discussions), Application forms/resumes, written tests, personal interviews, reference checks, letter of recommendations, medical checkup, etc.
- Some tools are better than the other in some respects. Therefore, it is best to use a combination of them and a predetermined sequence.

- Factors reflecting worker motivation, such as punctuality and attendance, maybe elicited within the interview, back contacting previous employers may give more reliable information.
- If possible, try to verify evidence of specific skills, knowledge, and abilities at more than one point in the selection process.
- Let us useful to identify specific tools which would be utilised for measuring the specific skills, knowledge or ability by using a table.

Table 3.3 Identifying Selection Tools to Measure Skills/Knowledge/Abilities

Skills/Knowledge/Abilities	Prelim. Screening	Appln. Form and Resume	Written Test	Personal Interview	Reference Checks
Educational qualifications		O			X
Subject knowledge			X	O	
Oral communication skills	O			X	
Written communication skills		O	X		
Leadership skills	O				X
Team spirit	O				X
Analytical ability			X		
Computer skills		O		X	
Dressing sense and physical appearance	O			X	

X - Principal method for measuring skill

O - Secondary method

- The questions and situations to be used in the various methods deployed in the selection process need to be finalised before and keeping in view the various attributes to be gauged in the applicant.
- Some of the tools like the preliminary screening and application forms may be used to eliminate a proportion of the applicants when the number of applicants is very large.
- The sequence of the hurdle is generally kept such that the more expensive and time-consuming selection tools are used later in the selection process.
- Inviting candidates to participate can include a description of the steps in the process, their sequence, and any required applicant preparation.

- The sequence of hurdles may be programmed to minimise travel and expense for both applicants and employer.
- A preliminary telephone interview with geographically distinct applicants may eliminate unnecessary travel.
- Written tests can sometimes be mailed when they can be administered to applicants by a trusted, qualified third party.

5. Perform a pre-interview orientation:

- A pre-interview orientation is very helpful for the potential candidates.
- This orientation should brief them of the company profile, its activities, and future outlook.
- It allows the candidates to clarify any doubts about the job and the company by asking questions.
- It also helps in arousing the interest of the potential candidates to apply for the job in the company.

6. Preliminary screening:

- When the number of applicants for a job is very large, preliminary screening can be performed to eliminate less worthy candidates.
- Group discussions have been found useful for screening candidates for managerial positions.
- The communication skills, listening skills, team skills, and leadership acumen of the candidates are tested through group discussions.
- Some organizations prefer to conduct objective type tests to screen out candidates.

7. Review application forms and resumes:

- Well drafted application forms aid in capturing the academic and employment history of candidates.
- Similarly, resumes and curriculum vitae (CV) are helpful in this regard.
- The advantage of a standard application form vis-à-vis resume is that it facilitates easy comparison of the profile of two or more candidates on various parameters-gaps in employment, too short stints organizations in the past, etc.-evident in the application form provide opportunity to the selection committee to seek clarifications later during the personal interview stage.

8. Conduct written test:

- Written tests constitute the next step in the selection process.
- There are various types of tests to measure knowledge, ability, skills, aptitude, attitude, honesty, and personality.
- These are: power tests, speed tests, open-book-open-web exams, etc.
- The format of the tests can also be varied, e.g. multiple-choice, short answer, fill in the blank, and long answer or essay questions.
- Naturally, essay questions are relatively in time consuming during evaluations compared to the objective type tests, however they provide better insights about the candidates written communication skills.

9. Conduct personal interview:

- Candidates qualifying in the written test are subjected to the personal interview.
- Personal interview provides a perfect opportunity to the selection committee to check the personality, knowledge, verbal communication skills, etiquettes, dressing sense, and ability to respond to situations imprompt.
- Structure interviews require the questions and this sequence to be determined prior to the interview.
- A structured format is helpful in comparing the performance of two or more candidates.

10. Make the job offer:

- If the reference checks result in good feedback about the candidate, an offer letter is sent to the candidate.
- Otherwise, it is customary to send a formal rejection letter.
- It is not uncommon that a few candidates do not accept the final offer of employment made by an organization.
- If no response is obtained from the candidate or a negative response about the offer is received, the records of the candidate are entered in archives for future action as per company policies.
- The policies of some organization prohibits such an applicant from applying again for a job, while other organization have a lenient and open policy whereby the candidate gets an opportunity to apply again in future.

- The offer letter should include a joining date after consultation with the candidate.
- Normally, there is a notice period varying from 1 month to 3 months, which has to be given by the candidate to his current employer before exiting.
- If the selected candidate requires relocation to a new place, some time period for transiting and settling down should be allowed.
- The relocation expenses are normally borne by the employer and all the modalities in this regard should be mentioned in the offer letter.

11. Medical Examination:

- A post-offer pre-employment medical examination is a must especially when the company asked to cover the candidate and is dependent family members by medical insurance.
- The cost of such a medical examination is borne by the employer.

12. Induction and orientation:

- The new employees are most receptive to change in their career time, when they are joining a new employment.
- Therefore, formal induction and orientation of the employees help them in understanding the various facets of the organization.
- Unwritten rules, traditions or informal perks should be discussed with employees as a part of orientation period.
- The first day in the office is always special for everybody. Therefore, proper arrangements have to be made before the joining date of the employee.
- This includes suitable workstation/room, stationery, computer hardware/software, and a welcome gathering.

Chapter 4: Directing and Controlling

Meaning and Nature of Directing:

- **Directing** means taking actions to motivate people and help them see that contributing to group objectives is in their own interest.
- The most compelling example of directing is from the Bhagavad Gita, in which Lord Krishna motivates Arjuna on the battlefield before the start of the Kurukshetra war.
- Responding to Arjuna's confusion and moral dilemma, Lord Krishna explains to Arjuna his duties as a warrior and prince and elaborates on different Yogic and Vedantic philosophies, with examples and analogies.

Principles of Direction:

1. Creation of synergy of individual efforts
2. Unity of Command
3. Close interaction with subordinates
4. Feedback and suggestions for improvement
5. Motivate , enthuse and enthrall
6. Lead by example

1. Creation of synergy of individual efforts:

- Organizations comprise of numerous individuals with diverse set of personal objectives, beliefs and values.
- An effective direction would align their personal objectives towards the organizational objectives so that individuals start behaving like a coherent team, thus resulting in synergy of individual efforts.

2. Unity of Command:

- People tend to get confused when they get direction and orders from more than one superior.
- Some of these orders may be completely divergent to each others, thus adding to the misery of the subordinates who are supposed to follow them. Therefore, unity of command and direction is a useful principle.

3. Close interaction with subordinates:

- It is important for bosses to have close interaction with their subordinates to guide them, mentor them and empathize with them.
- The human contact creates a unique sense of direction, which at times is difficult to achieve by other modes of communication in this networked world.

4. Feedback and suggestions for improvement:

- Occasional feedbacks on performance, particularly the positive feedbacks from superiors to subordinates are encouraging for them.
- Negative feedbacks should be inter-ensconced with constructive suggestions for improvement so as to minimise the heart failing on part of the subordinates.

5. Motivate , enthuse and enthrall:

- Motivation lies at the heart of direction.
- People should be directed in such a way that they feel motivated, enthused and fascinated to follow the directions given to them whole-heartedly.

6. Lead by example:

- It is the principle which says, “preach what you practice”.
- Thus, followers understand the directions of their leader much better, when the leader follows herself what she preaches.
- Example: a boss who is very strict about the timely arrival of employees to office, need to be punctual himself.

Leadership Styles:

- **Leadership** is defined as influence, that is, the art or process of influencing people so that they will strive willingly and enthusiastically towards achievement of group goals.
- There are various leadership styles, and there are several instances in which each of these styles have proved to be effective.



1. Autocratic leadership:

- In the autocratic style of leadership, the leader takes the decisions on his own without consulting his subordinates.
- He expects the subordinates to simply follow the diktat and the commands given by him.
- There is no scope for team decision-making and it may result in loss of creativity and freedom of expression on part of subordinates/followers.
- There is a lot of stigma attached to this style of leadership due to its non-participate approach.
- However, the style is effective when the leader enjoys considerable authority and power in the form of discretion to reward and punish the subordinates for compliance/non-compliance of orders.

- This style is also effective when the leader commands a lot of respect due to past achievements, e.g. being the founder of the organization.
- The adjoining caselet on Matsushita Electric company aptly illustrates the autocratic style of leadership adopted by Konosuke Matsushita, its former Chairman, to address a price reduction request from one of their customers.

2. Democratic/participative leadership:

- The democratic/participative leader involves the subordinates, peers, superiors, and other stakeholders in the decision-making process rather than taking the decision on his own.
- This style is helpful in winning the confidence of the people who would later be involved into the implementation of the decision.
- This style leverages the collective wisdom of a group and hence, has a better likelihood of taking different perspectives into consideration before a decision is made.
- The people involved in decision-making have the opportunity to express their opinions freely for influencing the leader.

- Therefore, the people can exploit their creative skills and feel motivated for being part of the decision-making process.
- Many times, they start “owning” the decision and make sure that it achieves its objectives during implementation.
- Drawbacks: this style by virtue of involving many people is time consuming and requires maturity and skills on part of the leader to ensure that the discussion on the issues does not go haywire and the meeting time is utilized efficiently to arrive at well thought of decisions.
- The adjoining caselet on Bando Chemical company illustrates this leadership style followed by its factory manager.

3. Laissez-faire or free-rein leadership:

- The French phrase Laissez-faire means ***leave it be*** and is used to describe a leader who leaves his colleagues to get on with their work.
- Intentionally, little control is exercised by the free-rein leader over his subordinates to allow them a high degree of freedom.
- This style is preferred when the leader is fully confident about the capabilities of his subordinates in setting their own goals and achieving the same.
- However, the leader communicates regularly with his subordinates to provide them advices and resources as and when needed.
- The caselet entitled JRD's Decentralization and Ratan's Centralization for Tata Empire depicted the free-rein leadership.

4. Bureaucratic leadership:

- Bureaucratic leaders work “by the book” and expect their subordinates to follow the procedures strictly.
- This style of leadership is prevalent in the public sector units (PSUs) whereby there are rules and regulations prescribed by the governmental regulators like the Comptroller and Auditor General (CAG) and the Central Vigilance Commission (CVC).
- This leadership style is thus laced with heavy controls, which may be demotivating for the employees, but is deemed helpful in the standardization of process and in reducing corruption.
- Despite the negative connotations attached to the terms like bureaucracy, red-tapism, etc., the bureaucratic leadership has been successfully demonstrated in Indian scenario by the likes of E. Sreedharan and Delhi Metro Rail Corporation.

5. Charismatic leadership:

- Charismatic leaders have the charisma and the charm to induce their followers to follow them whole-heartedly.
- Musser notes that charismatic leaders seek to install both commitment to ideological goals and also devotion to themselves.
- Conger & Kanungo describe 5 behavioural attributes of charismatic leaders:
 - Vision and articulation
 - Sensitivity to the environment
 - Sensitivity to member needs
 - Personal risk taking
 - Performing unconventional behaviour

- Charismatic leaders become synonymous with the organization and often, corporate identities and brands are built around them.
- Charismatic Leaders carry a lot of responsibility for the future of the organization, as their untimely exit from the organization may risk its very existence.
- Example: Dr. Vijay Mallaya of the UB Group.

6. Servant leadership:

- Robert Greenleaf is recognised as the father of servant leadership.
- He described servant leadership in this manner: “It begins with the natural feeling that one wants to serve, to serve first. Then conscious choice brings one to aspire to lead... the difference manifests itself in the care taken by the servant-first to make sure that other people’s highest priority needs are being served. The best test, and difficult to administer, is: do those served grow as persons, do they grow while being served, become healthier, wiser, freer, more autonomous, more likely themselves to become servants?”

- Chanakya or Kautilya, the famous strategic thinker from ancient India, wrote about servant leadership in his 4th century B.C. book Arthashastra:
 - *The king(leader) shall consider as good, not what pleases himself but what pleases is subjects(followers).*
 - *The king(leader) is a paid servant enjoys the resources of the state together with the people.*
- Servant leadership emphasises collaboration, trust, empathy and the ethical use of power.
- At heart, the individual is a servant first, making the conscious decision to lead in order to better serve others, not to increase their own power.
- The objective is to enhance the growth of individuals in the organization and increase teamwork and personal environment.
- Example: N R Narayana Murthy of Infosys.

7. Quiet leadership:

- The approach of quiet leaders is the antithesis of the classic charismatic leaders in that they base their success not on ego and force of character but on their thoughts and actions.
- In the words of the Harvard Business School professor Joseph L. Badarocco, “You end up defining quiet leaders almost through a series of negatives. They are not making high-stakes decisions. They are often not at the top of organizations. They don't have the spotlight and publicity on them. They think of themselves modestly; they often don't even think of themselves as leaders. But they are acting quietly, effectively with political astuteness, to basically make things somewhat better, sometimes much better than they would otherwise be”.
- Example: Azim Hasham Premji, Chairman of Wipro Corporation.

8. Transactional leadership:

- The transactional leader's focus is to get the "transaction" done smoothly and efficiently.
- The transaction here is the job assigned to the subordinates, which may be a project on hand.
- The subordinates are expected to obey the leader's orders about accomplishment of the task.
- If the task is accomplished successfully, the leader may reward the consent subordinates with incentive and increase the performance is below expectations, an unannounced punishment may be in store.

- The transactional leader tends to follow the management by exception approach whereby the subordinate's performance is critically examined only when there is a major deviation in the expected outcomes of the job assigned.
- In case of no major deviation, the leader saves time and effort of scrutinizing the performance of the concerned subordinates.
- This leadership style is popular in many industries, but as its limitations in the knowledge based are creative organizations.
- Example: Mukesh Dhirubhai Ambani

9. Transformational leadership:

- Transformational leaders have the capability to “transform” or radically change organizations and individuals for their betterment.
- They are visionaries who inspired others and successfully sell their vision to the followers, thus requiring great communication skills.
- Their enthusiasm is contagious, and they create a shared vision for the future.
- However, they need to be supported by the “detail people” who could take care of nitty gritty of implementation.
- Transformational leaders may not necessarily lead from the front and tend to delegate responsibility to the teams of their followers.

- Paradoxically, the same enthusiasm and passion that attracts the followers to the transformational leader may at times result into the followers getting overwhelmed and feeling worn out.
- Also, one of the traps of this leadership style may be that the passion and confidence of such a leader may be taken as equivalent to the truth and reality, which may not always be the case.
- Example: a caselet of the former President of India, Dr. A.P.J. Abdul Kalam.

10. Situational leadership:

- The situational leadership theory upon the premise no single leadership style suits every possible situation.
- The leader has to adopt his style to best suit the requirements of the situation on hand.
- A leader may prefer the bureaucratic style to train a group of new workers for operating on a machine, while the same leader may follow the democratic/participative style to seek improvement ideas for the process from a group of workers having past experience with that process.
- Keeping in view the variability in the leadership style, Tannenbaum and Schmidt identified three forces that led to the leader's action: the forces in the situation, the forces in the follower and also, forces in the leader.

- Maier noted that leaders not only consider the likelihood of a follower accepting a suggestion, but also the overall importance of getting things done.
- Thus, in critical situations, a leader is more likely to be autocratic in style simply because of the implementation of failure.

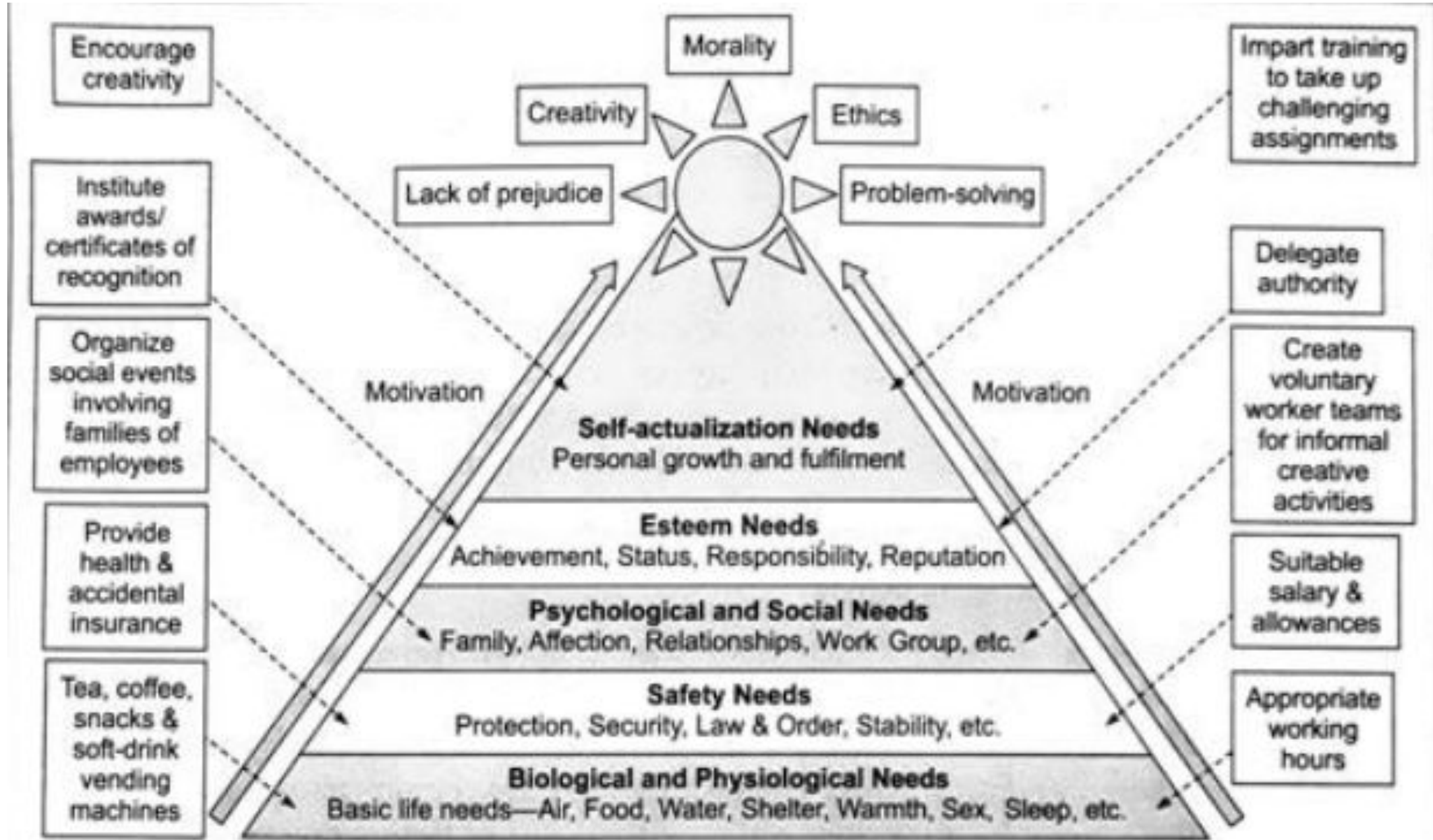
Motivation Theories:

- Robbins defined motivation as the “willingness to exert high levels of effort towards organizational goals, conditioned by the effort’s ability to satisfy some individual need”.

1. Maslow's need hierarchy theory:

- Abraham Maslow was an American psychologist.
- He is noted for his conceptualization of a five-tiered hierarchy of human needs, and is considered the father of humanistic psychology.
- Needs are defined as internal states which makes certain outcomes appear attractive.
- According to Maslow, the genesis of motivation takes place through needs.
- Motivation was defined as the willingness of exert high levels of effort to achieve certain goals.
- Maslow saw human beings needs arranged like a ladder.

Maslow's need hierarchy theory



- The most basic needs, at the bottom, were physical- air, water, food, sleep etc. Then came safety needs- security, stability, etc.- followed by psychological or social needs- belonging, love, and acceptance.
- The penultimate step in the ladder is made by the esteem needs-achievement, reputation, status, and responsibility.
- At the top of it all are the self-actualizing needs-the need to fulfill oneself, to become all that one is capable of becoming.
- The self-actualizing needs comprise of personal growth and fulfillment, activity, problem-solving, morality, ethics, and lack of prejudice.
- Maslow felt that unfulfilled needs lower on the ladder would inhibit the person from climbing to the next step.

- Maslow recommended that lower level physiological needs should be fulfilled for individuals to get motivated for self-actualization.
- Organizations can pragmatically use Maslow's hierarchy of needs pyramid to motivate their employees and ultimately reach the highest level of self-actualization.
- Example, the biological need of food and water can be fulfilled by installing tea, coffee, snacks, and soft-drinks vending machines in the office premises.
- Similarly, appropriate working hours would allow the employees to devote ample time with family and in resting.

2. McClelland's need theory:

- David McClelland was an American psychological theorist, who argued that all types of needs may not be uniformly applicable to all individuals, as some needs are acquired through interaction with environment, i.e. are learned or socially acquired.
- These are the need for achievement, need for power, and need for affiliation.
- The need for achievement was defined as the drive to excel, to achieve in relation to set of standards, to strive to succeed.
- The need for power was defined as the need to make others behave in a way that they would not have behaved otherwise.

- The need for affiliation was defined as the desire for friendly and close interpersonal relationships.
- Because effective managers must positively influence others.
- McClelland proposes that top managers should have a high need for power coupled with a low need for affiliation.

3. Theory X and Theory Y:

- Douglas McGregor was a professor at the MIT Sloan School of Management, who believed that managers use either of the two theories, namely Theory X and Theory Y, to motivate their employees.
- Theory X has a negative connotation in the sense that it is based upon the traditional approach of direction and control whereby managers place orders on their subordinates and place control mechanisms to keep an eye on the progress made by them.
- Thus, according to this theory, employees get motivated to work due to coercion, fear factor and force.

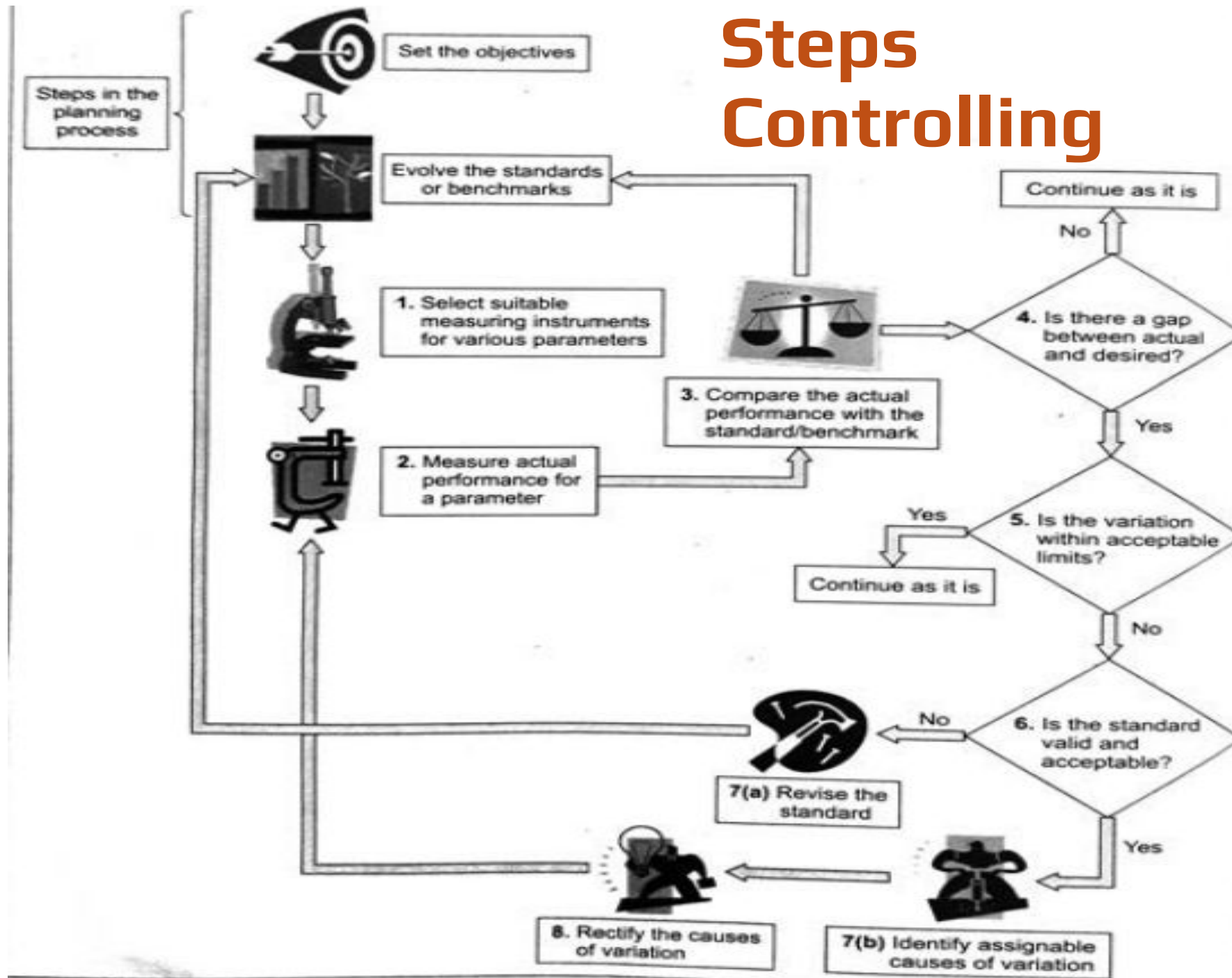
- On the contrary, Theory Y is based upon the modern behavioural approach which treats the employees as capable, responsible, and mature.
- McGregor argued that most organizations at time were fulfilling the basic needs of employees and therefore, the workplace needs to be re-organized in order to provide an environment for achieving higher-level social, esteem, and self-actualization needs.
- This way, the work would be more enjoyable for the employees who would willingly commit themselves to sharing more responsibility for achievement of organizational goals.

Controlling:

- **Controlling** is defined as measuring and correcting activities of people to ensure that plans are being realized.
- Thus, there is a clear-cut relationship between planning and controlling.
- The planning process sets out the objectives and standards to be achieved.
- The controlling process involves a feedback mechanism whereby the actual performance of a process is compared with the expected performance to identify any gaps therein.
- Efforts are then made to minimize the gap, by making corrections in the inputs or the variables of the process.

- The steps in controlling are preceded by two important steps of planning.
- Setting of objectives for managers, units and departments is necessary to provide them clarity on the expectations from them.
- On the basis of the objectives, standards or benchmarks are identified during the planning process.
- These standards are specific objectives against which progress can be measured for various parameters.
- Having established the standards, we proceed with the steps of controlling:

Steps in Controlling



1. Select suitable measuring instruments for various parameters:

- Measuring instruments have to be selected keeping in view the characteristic of a parameter in the standard to be measured.
- Example: 1) if we are trying to measure the customer satisfaction level, a survey instrument may have to be designed with appropriate questions in the questionnaire.
- 2) if we are gauging the number of defective ICs being produced by a production process, we would need suitable electronic instruments to test the ICs coming out of the production process.

2. Measure actual performance for a parameter:

- Using the measuring instrument selected earlier, measurement of the parameter is done.
- Care is taken to ensure that each and every time the measurement is done with accuracy for authenticity of the measurement data.

3. Compare actual performance with the benchmark:

- In this step, the data pertaining to the measurements of actual performance of a parameter is compared with the desired levels of performance specified in the standard/benchmark established earlier.

4. Is there a gap between actual and desired?

- This step is a decision point where it is determined if a gap exists between the actual and the desired performance of the parameter in the process.
- If no gap exists, the process is continued as it is.

5. Is the variation within acceptance limits?

- If a gap or variation does exist between the actual and the desired performance, it is ascertained if this gap is within acceptable limits of variation.
- This is because some variation is natural due to inherent characteristics of the process.
- Example: if the specification of the diameter of a shaft has been prescribed as 3cm (+-) 0.002cm.

6. Is the standard valid and acceptable?

- Before taking any action on the variation detected, it is important to verify if the standard established earlier is still valid and acceptable or not.
- This is because the expectations from the process may increase by the passing time, and the top management may like to set higher performance standards.
- Example, the client who sources shafts from manufacturer may come up with a more stringent specification for its diameter as 3cm (+-) 0.001cm.

7. a. Revise the standard:

- If it is clear that the earlier standard is not valid or acceptable anymore, it should be revised. Example, the shaft, it should be revised as per the clients request to 3cm (+-) 0.001cm.

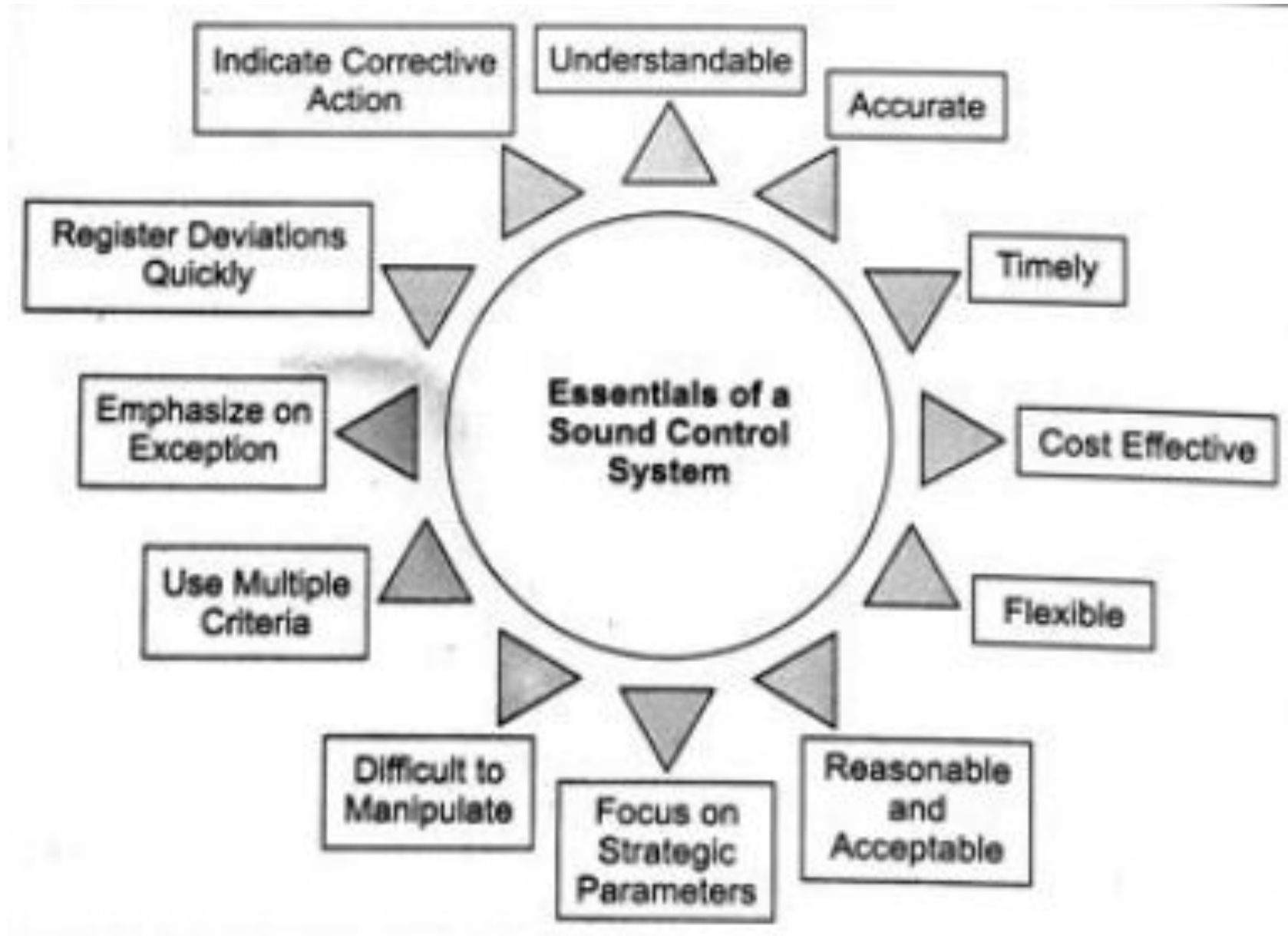
7. b. Identify assignable causes of variation:

- If the earlier standard still valid and acceptable, the assignable causes of variation are looked into.
- The assignable causes of variation may be due to wear and tear of the tools on the machine producing the item, lack of proper skills on part of the worker operating the machine, or worker fatigue, etc.

8. Rectify the causes of variation:

- Once the assignable causes of variation have been identified, corrective action is taken to bring the process back in control.
- Example, if it has been found that the variation was due to lack of skills on part of the worker operating the machine, the rectification would involve the proper training of the worker to improve his skills, especially in relation to the mistakes committed by him.

Essentials of a Sound Control System:



1. Understandable:

- A sound control system should be easily understandable by one and all.
- If it is very complicated to understand in the first place, its implementation would obviously be flawed.

2. Accurate:

- A control system needs to have acceptable levels of accuracy.
- It should accurately determine the gap or variation existing between the desired and actual performance of a parameter.
- If its accuracy is questionable, the whole control mechanism may collapse during implementation.

3. Timely:

- The control system should be implemented in a timely manner.
- Example, all organizations are required to conduct an external financial audit at the end of a financial year.
- The government prescribes time deadlines for submission of the audited results of the financial year.
- If these deadlines are not met, severe penalties are imposed by the government. Therefore, it is imperative for organization to conduct the financial audits well within the prescribed time deadlines.

4. Cost Effective:

- The process of control involves a lot of cost and effort.
- It is important that it yields benefits which surpass the cost involved.
- Example, many organizations invest huge amounts of money in training all their employees in quality management techniques while implementing Six Sigma, which often serves as a cost-effective control mechanism and yields staggering returns in the form of elimination of waste.

5. Flexible:

- Organizations today operate in highly dynamic environment which keeps on changing.
- This warrants the control mechanism to be flexible enough so that they can be modified easily to accommodate changes in the business environment.
- Example, if a firm is starting its operations in a foreign country, it would be helpful if its financial audit procedures are flexible enough to be easily modified to fulfill the accounting standards of that country.

6. Reasonable and Acceptable:

- The control mechanisms should not set standards which are too difficult to achieve.
- Otherwise, the people being subjected to such controls would feel threatened and try to resort to illegal/unethical means to justify the achievement of such stiff standards.
- They will also feel demotivated and disheartened if standards remain elusive to them.
- Therefore, control systems should be such that they pushed the employees to stretch themselves for achievements of attainable targets, still keeping them motivated and interested.

7. Focus on strategic parameters:

- Good control systems should not try to measure every possible parameter related to a process, as it may be very expensive in terms of time, cost, and effort with little benefits.
- It is always a good idea to be selective in approach and focus only upon those parameters which are most important.
- Example, in Six Sigma organizations, the focus is upon Critical to Quality(CTQ) characteristics, which are determined by surveying the customers in the first step of Six Sigma implementation.

8. Difficult to manipulate:

- A sound control system should be designed in such a manner that it becomes almost impossible for anybody to play around with it.
- Appropriate checkpoints should be incorporated in the control system to verify any wrongdoings on part of any person involved in the process being monitored.

9. Use multiple criteria:

- A single criterion is used to measure their performance of a process or person, then the people concerned good attempt to “look good” on that criteria.
- However, if more than one criterion is used to assess the performance, it is more likely that the assessment would be more objective and difficult to manipulate.
- Example, the performance of a sales executive should be gauged, not only by the monetary amount of cash orders secured in a quarter, but also how many such orders have resulted into actual cash inflow for the organization. Such dual criteria would motivate the sales executive, not only to secure orders, but also to ensure that the orders are fulfilled, and payments are obtained from the clients.

10. Emphasize on exception:

- A lot of effort and cost in controlling can be saved if the control systems are based upon the approach of Management by Exception (MBE).
- In this approach, managers avoid getting overwhelmed by excessive data generated by control mechanisms deployed everywhere in the organization.
- Instead, the emphasis is to bring only those expectations to the notice of the manager in which the performance is exceedingly above or below the desired level.
- This way, the manager can focus upon those processes/people requiring rectifications urgently rather than wasting effort on processes which are more or less under control.
- Example, a manager can specify that it should be brought to its attention if the allocated expense budget exceed buy more than 5%.

11. Register deviations quickly:

- Control systems should register deviations in the actual performance of a process/person quickly.
- This will allow for prompt action to correct the causes of deviation.
- A significant delay in registering the deviation by a control system will obviously lead to unnecessary cost of wastages.
- Example, if a control system deployed to control quality of a product registers a significant deviation in a parameter after one hour of its occurrence, all the units produced during that hour would be defective and may involve the cost of rework or may have to be scrapped.

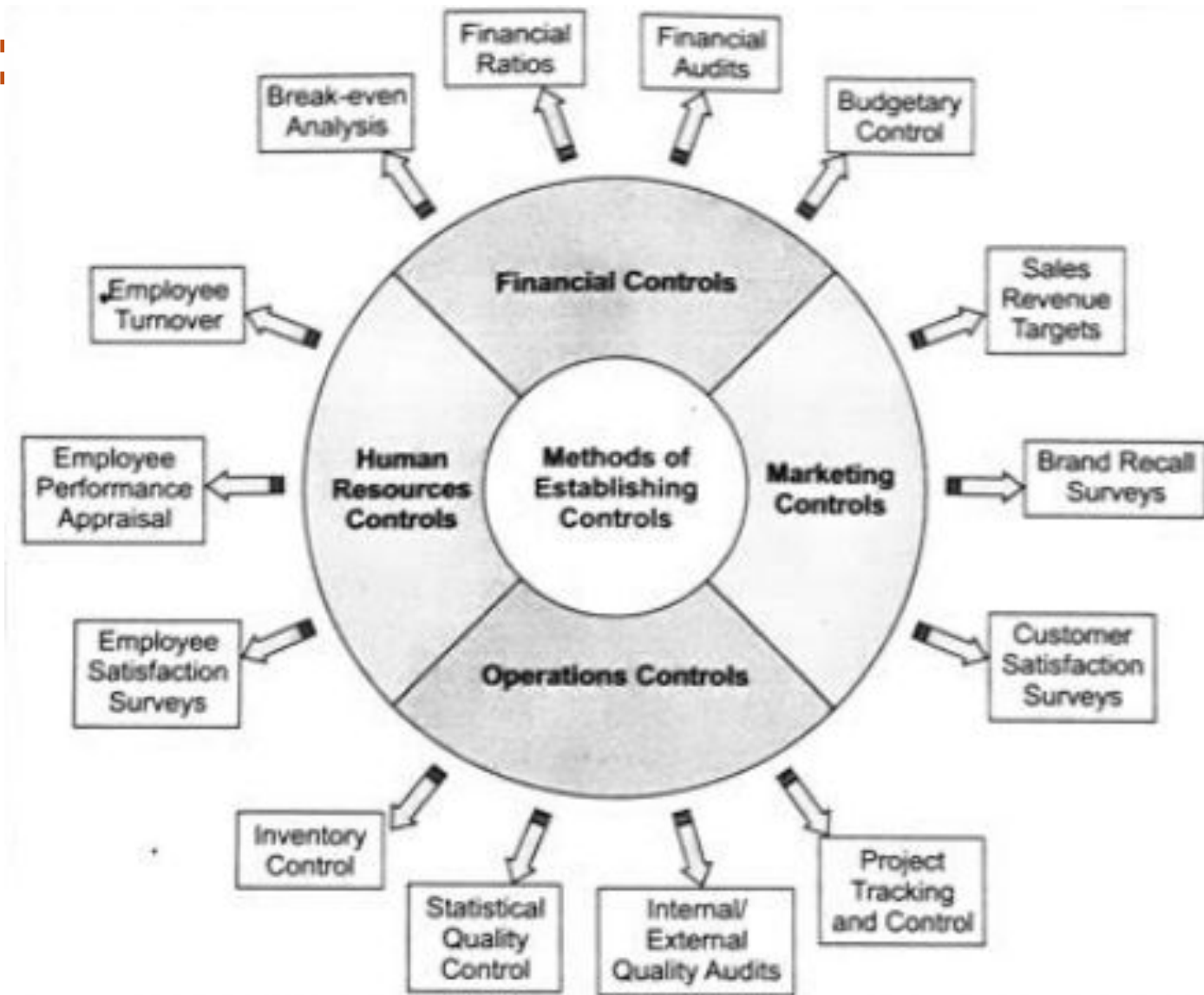
12. Indicate corrective action:

- A sound control system should not only capture the deviations, but should also provide guidance to corrective action to eliminate such deviations.
- The guidelines can be in the form of the if-then format, e.g. if an employee remains absent from duty for more than 2 consecutive days without informing his reporting manager, then a warning letter should be issued.

Methods of Establishing Control:

- The methods of establishing control can be categorised on the basis of functional areas, namely

- Financial controls,
- Marketing controls,
- Operations control, and
- Human resources controls.

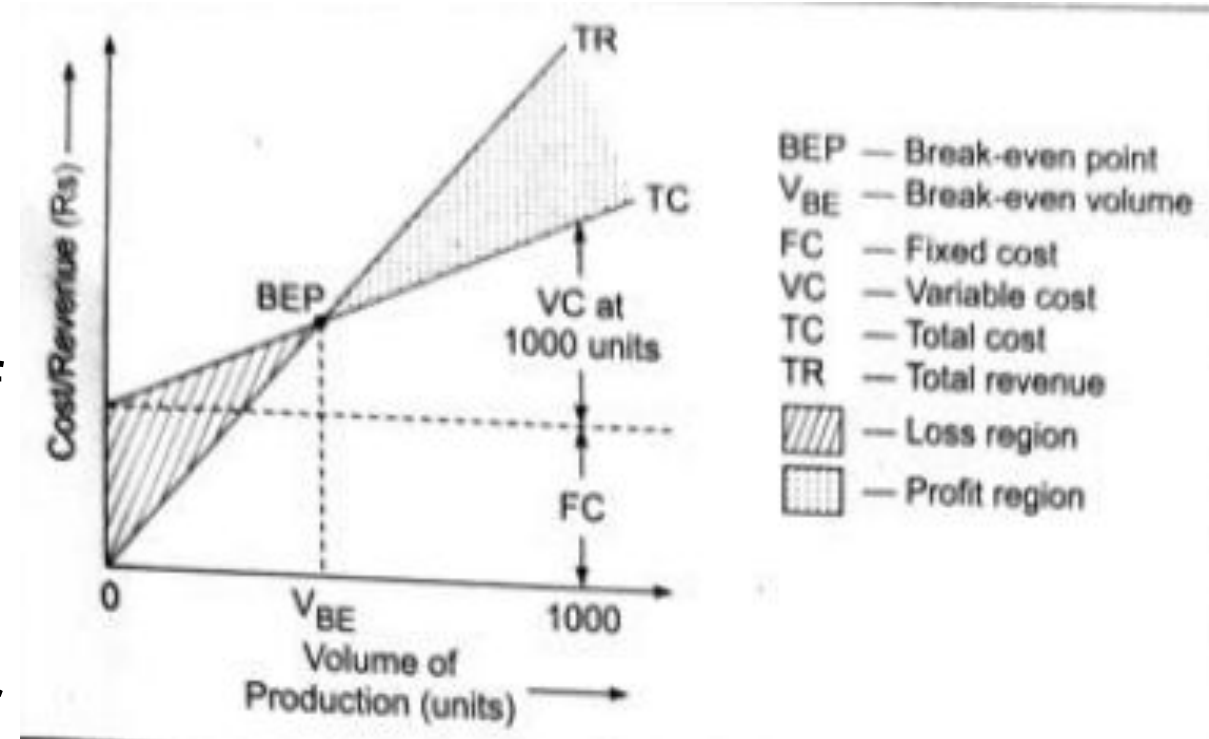


1. Financial Controls:

a. Break-even analysis:

- It helps in establishing controls by comparing the total costs with total revenues associated with an organization and by ascertaining the volume of production (called break-even volume) which would result in total revenues completely offsetting the total costs incurred.
- Thus, the break-even volume is the number of units of product to be produced such that the revenue generated recovers all the investments made.

- A graph shown is made to find the break-even point where the total revenue curve crosses the total cost curve.
- Fixed costs are the capital expenditures. These costs remain constant despite the volume of production.
- Variable cost is the cost of labour and raw material. As volume of production increases, more labour and raw material is required for production and thus, the variable cost increases.



- When the variable cost is added to fixed cost, we get the total cost at a particular production.
- The region between the total revenue and total cost curves on the right in the graph represents the profit region, while the region on the left represents the loss region.
- Thus, how far is the current volume of production from the break-even volume, provides a good control mechanism for the managers.

b. Financial ratio:

- Financial ratios are a popular means of establishing controls in organizations.
- Business enterprises have to be controlled to ensure that they are maximizing the wealth of the stakeholders.
- Some commonly used financial ratios are:

$$\text{Return on investment} = \frac{\text{Net profit after taxes}}{\text{Total assets}}$$

$$\text{Debt-to-equity ratio} = \frac{\text{Total debt}}{\text{Net worth}}$$

c. Financial audits:

- As per the government regulations, all organizations have to get their financial accounts audited through an external auditor within a prescribed time frame.
- These financial audits serve as useful control mechanisms to ensure that all the financial transactions are done by the firm in a legal and ethical manner.
- However, as the caselet entitled “True Lies in Satyam” in this chapter demonstrated, in India, there is a need to further strengthen the control mechanisms on this front to encourage and ensure fair accounting practices.

d. Budgetary control:

- Budgets are financial plans for a given period of time.
- The same financial plans also serve as control mechanisms during the later stages.
- During the planning stages, amounts of money to be spent as expenses by departments/individuals are allocated as budgets.
- During the control phase, it is determined if any department/individual has exceeded the budgets allocated earlier for the designated time period.
- Budgetary control can also be exercised in the interim period to know if the objectives achieved till that time are proportionate to the expenses incurred or not.

2. Marketing controls:

a. Sales revenue targets:

- It is customary to assign sales revenue targets for a given period to all the sales executives in an organization.
- These targets become efficient control mechanisms in gauging their performance in the given period.
- At any point in time during the given period, an assessment can be made if the sales revenue achieved by the sales-person till that time is in line with the target for the period or not.

b. Brand recall surveys:

- Many companies spend staggering amounts of money year after year in promoting their brand by way of advertising through various media and means.
- In order to gauge the effectiveness of these advertising campaigns, brand recall surveys are conducted.
- These surveys are excellent control tools, which ask the respondents by way of various questions in the survey instrument if they remember the company's brand.
- The data so collected is utilised to realign the branding strategy of the company for future.

c. Customer satisfaction surveys:

- Keeping an eye over the pulse of the customer is the key to the success of the organisations in today's competitive world.
- Customer satisfaction surveys help the companies in knowing the ever-changing needs and preferences of the customers.
- The data so collected is analysed to bring about the necessary changes in the features of the company's product or service.

3. Operational controls:

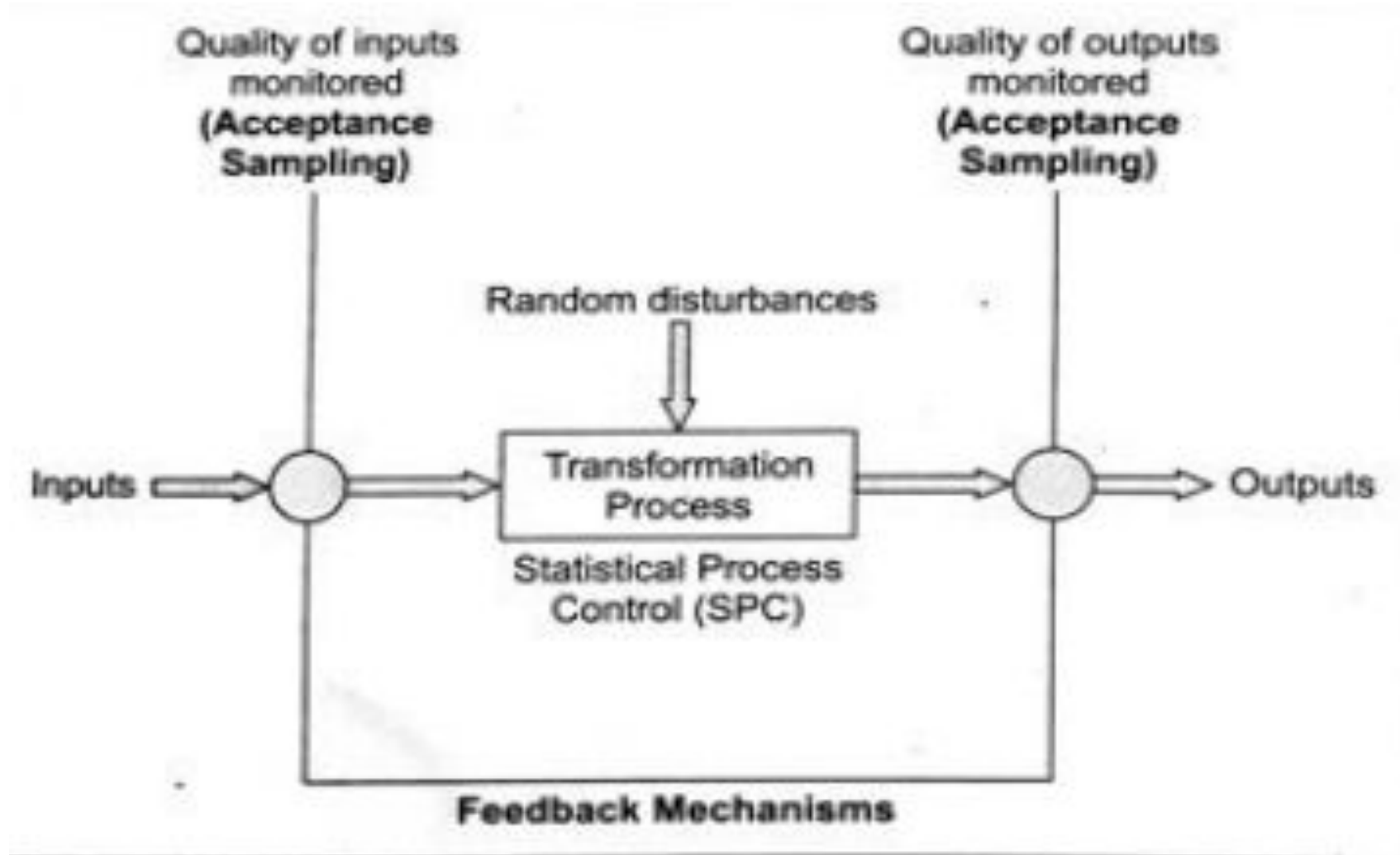
a. Inventory control:

- Inventory is the stock of idle resources in a firm for some future use.
- In organization, inventories can be of various types.
- For manufacturing organizations, there are inventories of raw materials, components, sub-assemblies, tools and equipments, semi furnished goods, finished goods etc.
- For service organizations like banks, financial institutions, hospitals, etc., the inventory consists of various items to be used in various service operations.
- Example, in hospital, there are inventories of medical equipments like syringes, glucose bottles, etc. And other accessories like bandages, cotton, etc. in addition to various types of medicines.

- Low level of inventory may result in shortages or stock outs.
- High level of inventory as its own disadvantageous. High level inventory involves more capital tied up, for which probably the interest has to be paid to the bank.
- Even if the capital employed here is out of the reserves of the company, the opportunity cost of the capital is equivalent to the interest payment.
- Therefore, the inventory of an item should neither be too high nor too less.
- It should be just optimal, i.e. best possible level for an item.
- Various types of control mechanisms are employed by organization for inventory control e.g. periodic checks, the economic order quantity(EOQ) model, just in time (JIT) replenishment, etc.

b. Statistical quality control:

- The ultimate aim of every organization is to deliver quality products and services to its customers.
- For achieving this objective, quality is to be monitored at every stage-from input to the output.
- **Acceptance sampling** is a procedure of ensuring that the inputs like raw materials, parts, components, labour skills, etc. are all of the desired quality levels.
- It is also used for the outgoing inspection of the finished goods before distribution to the customers.
- Acceptance sampling is applied at the output stage of the transformation process.
- If a defect arises during the production of a batch or lot of items, all the items of the lot will have to be rejected as scrap.



Statistical quality control

- This will be of immense loss to the company. Thus, in addition to the acceptance sampling at the input and output stages, quality of items has to be monitored during the transformation process.
- Thus, samples of items produced are inspected for quality at regular intervals of time.
- If variations are found from the previously fixed standards, for such variations are found, and then rectified.
- This procedure of ensuring quality during the transformation process is called **statistical process control(SPC)**.
- Quality control mechanisms like SPC, acceptance sampling, and many more techniques using statistics to monitor and improve quality or jointly termed as **statistical quality control(SQC)**.

c. Internal/external quality audit:

- The quality audit has been defined in ISO 10011 as: “An aortic is systematic and independent examination to determine whether quality activities and related results comply Beth plant arrangements and whether these arrangements are implemented effectively and are suitable to achieve objectives.”
- A quality system audit involves the concept of conformance, particularly as a precisely measurable factor.
- The audit's objective is to check firstly, whether the quality system in the organization is in compliance with the documented standard(like ISO 9000) or not.
- Secondly, whether the operation of the system is in compliance with the documented procedures.
- The organization is required to establish a quality management system(QMS), which is the basis of control for the critical activities of the organization which demand a systematic approach, i.e. quality management.

- Internal quality audits have to be conducted by the organization from time to time in order to ensure that the quality system is maintained in the future.
- The internal quality audits can be performed by the trained employees of the organization, who must have received formal training in conducting the quality audit.
- In case the organization does not have trained employees for conducting the internal quality audit, external auditors may be hired.
- Thus, internal/external audits are useful mechanism to control quality in an organization.

d. Project tracking and control:

- A project can be considered to be the achievement of a specific objective, which involves a series of activities and tasks which consume resources.
- In construction projects, the project managers can tell up to great accuracy as to how many times a particular activity will take based upon past experience with similar projects.
- The projects in which the time duration of various activities can be determined up to great accuracy are the ones which can be planned with the help of technique called the **critical path method(CPM)**.
- **Programme evaluation and review technique(PERT)** is applied in projects where the time duration of various activities are not known.

- This is especially suitable for research and development(R&D) projects, whereby researchers are usually not sure as to how much time a particular research activity will take.
- Both CPM and PERT make use of network diagrams in which activities in a project are arranged as per their precedence requirement and represented by arrows.
- CPM and PERT serve as planning tools during the planning phase of the project and then later become tools for tracking the progress of projects and for controlling them.
- Microsoft Project and Primavera are the popular software used for project planning, tracking, and control.

4. Human resources controls:

a. Employee turnover:

- Employee turnover is the ratio of the number of workers that had to be placed in a given time period to the average number of workers.
- This simple ratio is a good control indicator about the working environment of the organization and its employee retention capability.
- No organization desires to have high employee turnover ratio, however, certain types of industries have traditionally had higher employee turnover than other industries.

b. Employee performance appraisal:

- Performance appraisal of employees is used to control their performance vis-à-vis the annual objectives assigned to them.
- The performance appraisal should be conducted at regular intervals to ascertain if the employees are on the right track to achieve their objectives or not.
- Example, most organizations conduct of yearly and annual performance appraisal of their employees.
- At the beginning of the year, annual objective/target setting is done by the employee for herself in consultation with a reporting manager.

- During the midst of the year, a review is done by the reporting manager to track the progress made by the employee.
- At the end of the year, the final appraisal result in the determination of the incentives, bonus, increments, etc. on the basis of out close the annual objectives were met, not met, or exceeded by the employee.

c. Employee satisfaction surveys:

- Good organizations conduct employee satisfaction service regularly to find out the grievances of their employees and to know if they are happy with the work culture, environment, and their career prospects within the organization.
- The feedback thus received provides invaluable insights about issues faced by them.
- Thus, this control mechanism helps in providing a better work life to the employees for their retention and suitable career development in the organization.