

Management & Organizations



TABLE OF CONTENTS

| | |
|--|----|
| MANAGEMENT & ORGANISATIONS | 2 |
| The organisational concept | 2 |
| Elements of an Organisation | 2 |
| The Environment | 3 |
| Organisations as systems | 6 |
| Open and Closed Systems | 6 |
| Boundaries | 7 |
| Characteristics of Open Systems | 7 |
| Importance of Systems Viewpoint | 9 |
| ORGANISATION STRUCTURE | 10 |
| Departmentation | 11 |
| Functional Structure | 11 |
| Divisional Organisation | 13 |
| Composite Departmentation | 15 |
| Matrix Structure | 16 |
| Authority, power, and influence | 19 |
| Authority | 19 |
| Power | 19 |
| Influence | 20 |
| Principles of delegation | 20 |
| The Scalar Principle | 20 |
| Unity of Command | 20 |
| Delegation | 20 |
| Span of Control | 21 |
| Tall versus Flat Organisation Structure | 22 |
| LINE AND STAFF RELATIONSHIPS | 24 |
| Functional Authority | 24 |
| DECENTRALISATION | 27 |
| Centralisation v. Decentralisation | 27 |
| Factors Favouring Decentralisation | 29 |
| Factors Favouring Centralisation | 29 |
| Decentralisation of Various Functions | 30 |
| MODERN ORGANISATION STRUCTURES | 32 |
| Technology and Organisation | 32 |
| Impact of Technology on People | 33 |
| Impact of Technology on Structure | 33 |
| Management Systems | 34 |
| Stable v. Unstable Technology | 34 |
| Programme/Project Management Departmentation | 35 |

MANAGEMENT & ORGANISATIONS

Examples of organisations are a business, a church, and a golf club. An organisation is a group of people but not any group like a crowd in a railway station or in a supermarket.

By Chester F. Barnard's widely accepted definition of an organisation, it comes into being where persons:

1. Can communicate with one another,
2. Are willing to contribute action, and
3. Aim to accomplish a common purpose.

Organisations are therefore expected to ensure:

1. Communication,
2. Co-operation, and
3. Common objectives.

Formal organisations usually state their objectives and consciously plan ways of attaining co-operation. A family, a group of friends, and other informal organisations usually do not have explicit objectives that are evident to the outsider. Furthermore, the means by which co-operation is attained is largely spontaneous or voluntary.

THE ORGANISATIONAL CONCEPT

Think of organisations as complicated but understandable systems in states of continuous change. Do not think of static charts. Organisations are dynamic.

The first management theorists tended to view organisations as simple, static, and self-contained arrangements of people. This simplification was a useful start, but this rough first approximation to the facts of organisational life is less and less in touch with the realities of modern business.

Elements of an Organisation

Figure 1 shows the four important variable elements in any organisation.

1. The task is the reason for the organisation's existence, for example, the production of cars, the winning of an election, or participation in a sport.
2. The people are those who pool their efforts or resources to accomplish the organisation's task. They may be employees, members, or players.
3. The structure is the way in which the people (and the machines) used are organised into a man-machine system to achieve the desired goals.
4. Technology is the methods that the man-machine systems so organised adopt to attain the objectives.

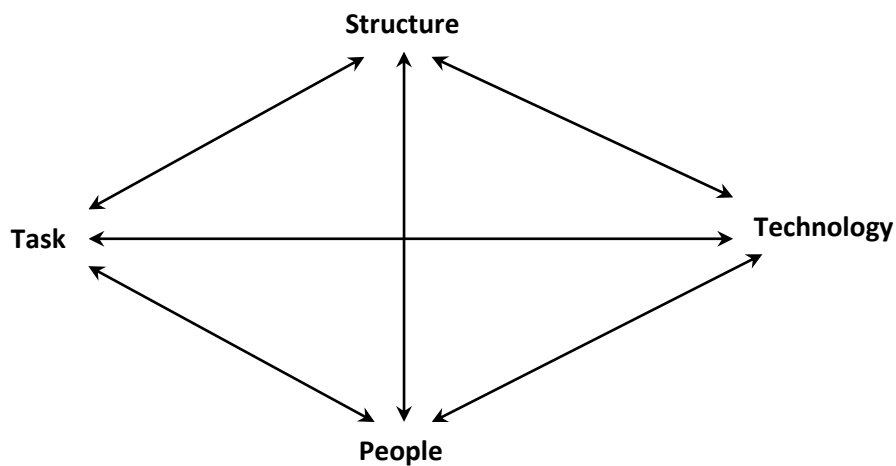


Figure 1: Element of an organisation

Never consider an element in isolation. A change in technology, for example, a new manufacturing process, may affect both the employees (people) and the structure of the plant and may also affect the task by leading to the production of a new or better product.

Similarly, a change in structure, say, from centralised control to decentralisation, affects the techniques of planning, control, and reporting, may affect the people, because more managers or planning staff are required, and may influence the tasks because certain functions previously centralised must now be undertaken by the decentralised business units.

The Environment

The model in Figure 1 pictures an organisation in a vacuum, as seen by the early management theorists. In fact, the organisation lives in environments that influence it and each of its elements, and it also influences its environment.

Figure 2 shows that we have in fact a series of environmental systems, which also interact with each other. The organisation's competitive environment, for example, is the market for the products or services that the organisation produces, the source of its competition, and also the source from which it obtains new techniques or new staff and into which it introduces its own new technology.

In the wider social-political-ecological environment, we find all the individual industrial or commercial competitive environments. People are becoming increasingly aware of the social responsibilities of industry, the pressure of political policies in the economic sphere, and so on.

Interaction with environment: The organisation interacts with the environment in the sphere of each of its constituent elements.

Organisations have grown considerably in size and complexity, and bigger and more important decisions have to be made than in the past. With the much faster communications and transport today, decisions must also be made much faster.

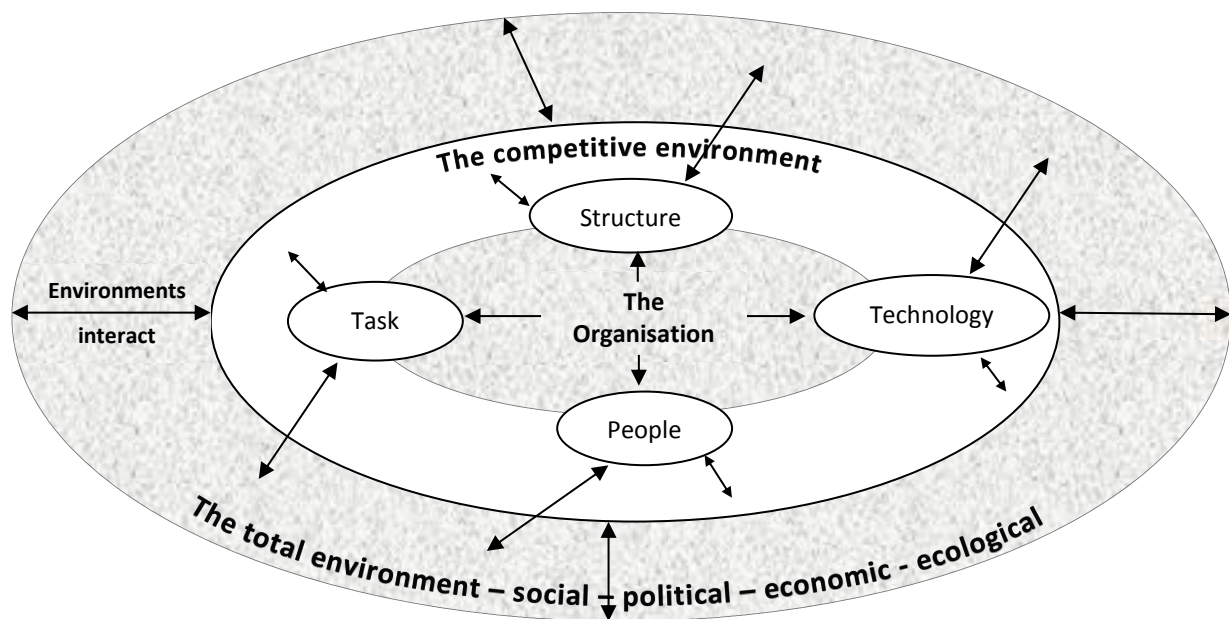


Figure 2: The organisation in its environments

Today, vast sums must be spent on capital equipment, and many of the processes are automated, which results in a small workforce being responsible for a high productive output. The New Zealand Forest Products paper mill at Kinleith and the Comalco aluminium smelter at Bluff are two examples. The capital investment per worker is very high, and so a breakdown in production would be very expensive in terms of idle plant, and the plant must be fully utilised to be economic. In the past, if demand fell off, you simply put off many of the workers and saved money that way. Today, if your plant is idle, you have high fixed costs to carry.

Because of changes in technology, the machines and equipment and possibly the jobs that go with them can rapidly become obsolete. One estimate is that after 20 years, 30% of jobs that will exist then do not exist now. Organisations must make considerable adaption to change.

The general increase in the education of workers provides a more sophisticated atmosphere in organisations. Workers are becoming less tractable and more inclined to think for themselves.

The old methods for handling staff are no longer relevant, and new methods must be developed to deal with today's worker. The process of change in this field is accelerating and provides another complicating variable for organisations.

The knowledge that organisations are operating in a dynamic environment, that matters and events in that environment impinge upon and affect organisations, and that a change in any one of the four elements of an organisation will affect the other three will help you to understand and keep in balance some of the very different approaches to management theory that you are studying.

In lesson 1, we saw that some theorists were strongly oriented towards techniques or structures, whereas others were oriented towards people. The modern manager must recognise the perspective, learn from the insights, but avoid the trap of opting exclusively for one or other of the various schools. As you study, try to fit the various approaches that you meet into the model we have just discussed.

SUMMARY

Think of organisations as dynamic sets of interrelated systems designed to perform complicated tasks. The elements are tasks, technology, structures, and people. We can manipulate at least three of these to get the performance of tasks changed or improved. If, however, we alter any one of the variables, we are likely to cause significant effects on the others.

The organisation operates in an environment of other organisations and structures, changing that environment but also being changed by it.

PRACTICE EXERCISE A

1. If we wish to affect the accomplishment of the task, what three variables can be manipulated?
2. What makes up the technique or technology?
3. What factors affecting task performance cannot, in general, be manipulated or can be manipulated only to a minor degree?

(Answers on page 38).

ORGANISATIONS AS SYSTEMS

By the modern approach to organisation theory, think of the business enterprise as a social system. A system is an orderly arrangement of interrelated and interdependent parts functioning as a complex whole to perform some activity. That is, a system:

1. Is a complex whole.
2. Is composed of parts or elements that interact, and.
3. Functions to perform an activity or accomplish a goal.

Systems are of many kinds. A watch and an automobile are machine systems. The human body and a plant are living systems. Groups of people can form a social system. For example, a rugby team is more than just 15 people kicking a ball about. It is a recognisable unit in which each player has a specific function according to strict procedures (rules) and all players function in a team relationship with one another for a common purpose – to win the game.

A business organisation is a complex system made up of many parts or subsystems, consisting of people, machines, and procedures or routines in various combinations.

The unique characteristic of a system is the interrelationship of the parts within it. As systems, organisations are made up of parts or subsystems.

Open and Closed Systems

In systems theory, distinguish between closed and open systems. A closed system is self-contained, like a clockwork mechanism that has been wound up. An open system is influenced by and influences its environment. All organisations are essentially open systems, because they either trade, provide a service, or engage in activities with other people and organisations.

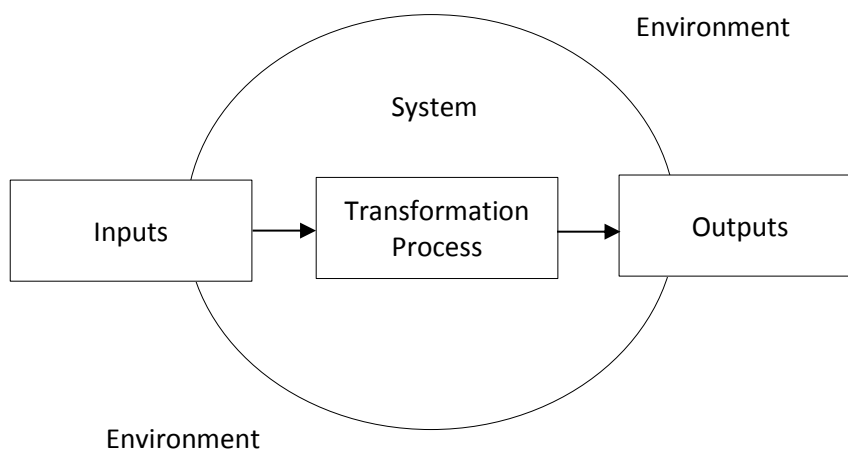


Figure 3: Basic open system

Boundaries

Separate the system from its environment and separate the various subsystems from one another. With a machine, its outer case is a clear and distinct boundary. Other system boundaries are more fluid. For example, the premises may define the physical limitations of the enterprise, the payroll marks out the staff from the rest of the working population of the country, or a certain geographical area may define the enterprise's market.

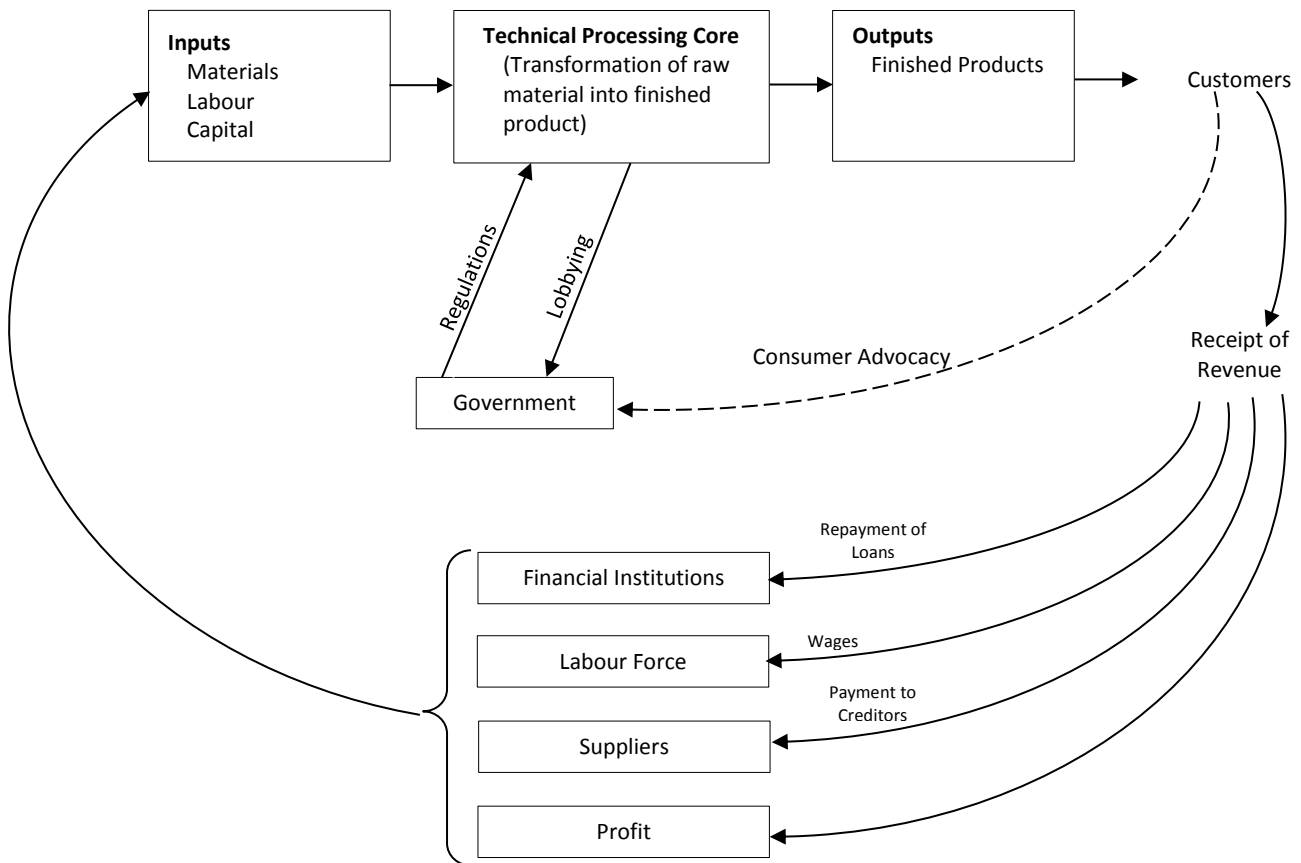


Figure 4: Complex open system

Figure 4 shows the more complex open system of an industrial organisation. The inputs are materials, labour, and capital. A technological process is created to transform raw materials into finished products. The output is the finished products sold to the customers.

Characteristics of Open Systems

The main characteristics of open systems are that they:

1. Interact with the environment,
2. Are cyclical,
3. Are self-maintaining, and
4. Are adaptive to change.

Interaction with the environment: Organisations obtain their raw materials and human resources from the environment. They also depend on clients and customers in the environment to absorb their output. Banks take in deposits, convert these deposits into loans and other investments, use profits to maintain themselves and grow, and export the rest in the form of dividends and taxes. The bank system therefore interacts actively with its environment.

An example of a large company that saw itself as a closed system was General Motors. General Motors, up until the early 1960s, operated as if it were a closed system. Management decided on the products it wanted to sell, produced them, and offered them to customers. The company assumed that whatever it produced would sell, and for decades it was right. It largely ignored its environment because its executives saw the environment as having almost no impact on its performance. Since the 1960s, however, the actions of consumer groups, stockholders, government regulations, and foreign competition have forced GM to react with and be more responsive to, its environment.

Cyclical character: An open system is cyclical in its operation. The outputs of the system furnish the means for new inputs, which in turn allow for the cycle to be repeated. Figure 4 shows that the revenue received by the firm must be adequate to pay creditors, pay the wages of employees, and repay loans, if the cycle is to be perpetuated and the organisation is to survive.

Self-maintaining: Open systems maintain themselves. The characteristic of closed systems is that they tend to run down. The term used to describe this process towards disintegration is entropy. An open system, however, because it imports inputs of energy from the environment, can maintain itself in being. It may do this in two ways:

1. The inputs and outputs of energy through the system maintain some constancy, resulting in a relatively steady state in the organisation. Rather as your body replaces most of its dying cells in any given year but your physical appearance alters very little, so an open system, although active in processing inputs to outputs, tends to maintain itself in a steady state.
2. The system tries to obtain some surplus of inputs over outputs so that it will grow and expand. The larger and more complex systems always seek this margin of safety beyond the minimum needed to keep them in existence. See Figure 4.

Open systems seek to achieve this balance. Maintenance activities ensure that the various subsystems are in balance and that the total system is in accord with its environment. This in effect prevents rapid changes that may unbalance the system.

Adaptive to change: In contrast, adaptive activities are necessary so that the system can adjust over time to variations in internal and external demands. Maintenance activities are aimed at stability and preservation of the status quo through the purchase, maintenance, and overhaul of machinery, the recruitment and training of employees, and mechanisms such as providing and enforcing rules and procedures. Adaptive activities, however, focus on change through such means as planning, market research, and new product development.

Both maintenance and adaptive activities are required if a system is to survive. Stable and well-maintained organisations that do not adapt as conditions change do not last long.

Similarly too, adaptive and unstable organisations are inefficient and are also unlikely to survive for long.

Importance of Systems Viewpoint

This viewpoint helps us to see the organisation as a whole, made up of interdependent parts or subsystems. From this viewpoint, lower-level managers tend not to see their jobs as managing static isolated elements of the organisation, and all managers tend to identify and understand the environment in which their system operates. The perspective helps managers to see the organisation as table patterns and actions within boundaries and to give insights into why organisations are resistant to change. Finally, the systems viewpoint directs managers' attentions to alternative inputs and processes for reaching their goals.

SUMMARY

A system is a set of interrelated and interdependent parts so arranged as to produce a unified whole.

Systems are closed or open. A closed system is self-contained, whereas an open system is a dynamic interaction of the system with its environment.

The characteristics of an open system are:

1. Environmental awareness,
2. Cyclical character,
3. Self-maintaining, and
4. Adaptive to change.

ORGANISATION STRUCTURE

In reading about management, we can often understand the meaning of *organisation* only from the context in which it is used. In this assignment, *organisation* means the structure of the enterprise, that is, the arrangement of men, machines, and procedures that enable the objectives of the enterprise to be attained. We shall study some of the more important factors in such an arrangement.

To approach the structuring of an organisation, ask

1. What is the organisation trying to do,
2. What work must be done if these objectives are to be attained, and
3. Which jobs or functions are best grouped together under a single boss?

The accepted logical and sound management practice for answering these questions is that originally put forward by Peter Drucker, the well-known author and management consultant. Rather than adopting preconceived general headings such as selling or engineering, Drucker advocates finding out what an enterprise actually does by analysis of three factors:

1. *Activities analysis*: Find out what work has to be performed, what work belongs together, and the amount of emphasis each activity requires in the organisation structure.
2. *Decision analysis*: Determine what kinds of decisions are needed, where in the organisation structure they should be made, and how each manager should be involved in them.
3. *Relations analysis*: Find out what contribution to corporate objectives each manager must make, with whom he should work, and what contributions other managers must make.

After doing these analyses, the organiser is in a position to decide the basis for the structure, which is invariably reached by the process of *departmentation*, explained on the next page.

Organisation may be classified as:

1. Public sector,
2. Commercial, and
3. Non-profit.

We shall look at examples of commercial organisations. The same principles underlie them and public sector and non-profit organisations.

Departmentation

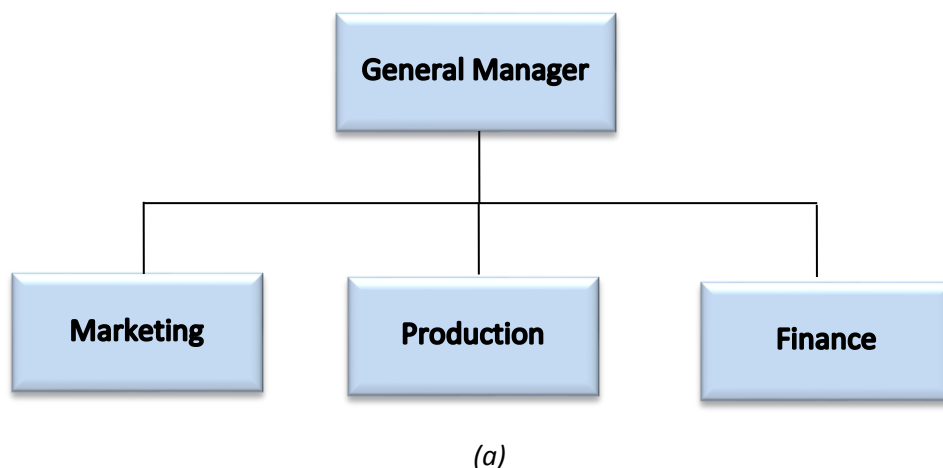
Departmentation is the process of grouping activities into units for administration purposes. It takes place at all levels in an enterprise, although the resulting units may be called departments, branches, offices, divisions, sections, or other names.

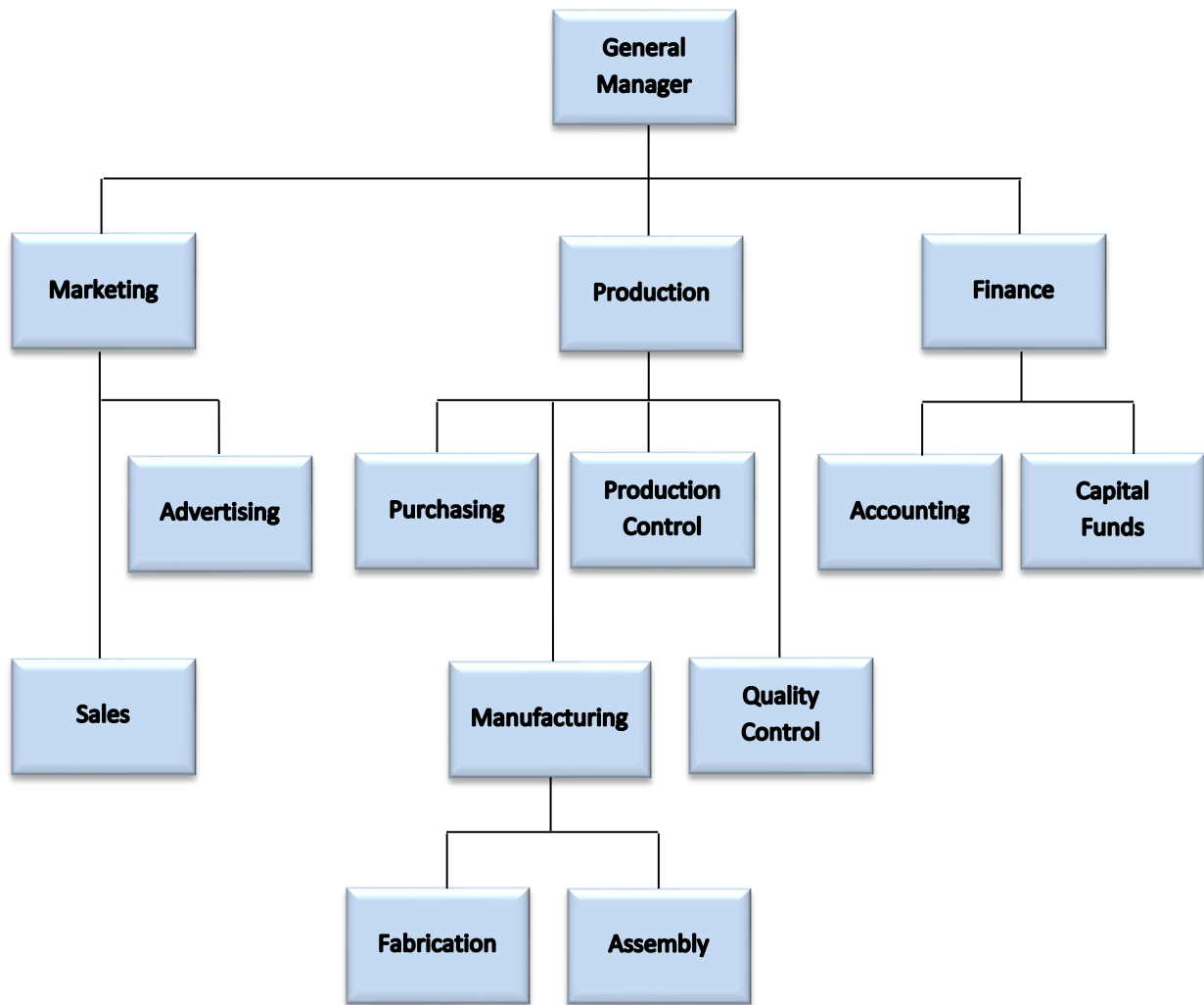
At the primary level, that is, the level immediately below the top position, the choice is between a functional structure and a divisional structure.

Functional Structure

An organisation based on functional structure, groups the work to be done into functional departments. For a commercial enterprise, as shown in Figure 5(a), the primary departments, that is, the first level of departments reporting directly to the chief executive, usually consists of marketing, production (of goods or services), and finance.

With organisation growth, as shown in Figure 5(b), certain activities may be split off and become derivative or second-level functional departments, and these may, in turn, be further subdivided.





(b)

Figure 5: Functional organisation structure

Advantages: The functional structure

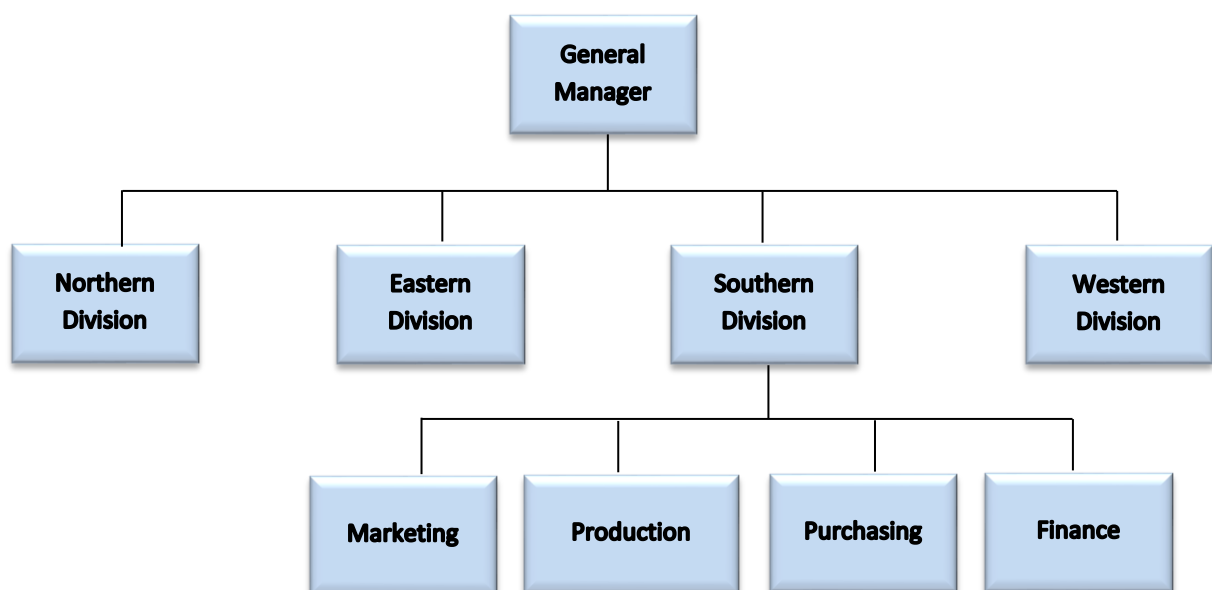
1. Follows the principle of occupational specialisation and is therefore a logical expression of the functions in a business;
2. Maintains the importance and prestige of the major functions;
3. Simplifies training; and
4. Makes for tight control at the top, because all primary departments report directly to the top executive.

Disadvantages of the functional structure arise mainly with organisational growth:

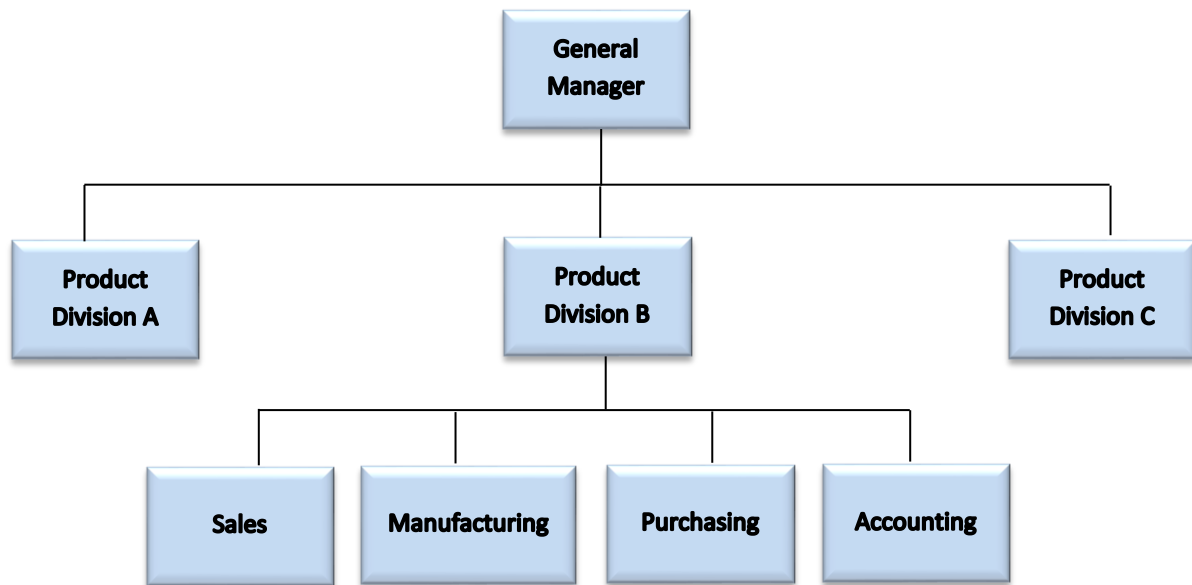
1. The structure tends to increase the number of organisational levels, which increases the difficulties of common direction and mutual understanding.
2. The main emphasis is on specialisation, which can increase the difficulties of co-ordination between functions.
3. Opportunities to train and test general managers are limited. The functional specialist may become so narrow in his vision, skills, and loyalties that he is unprepared for the general management position.
4. To set objectives and measure results is difficult. The responsibility for profits exists only at the very top, and in terms of individual functions, the objectives tend to be set in terms of professional standards rather than departmental objectives.
5. The structure tends to lump together activities that are only superficially related. For example, the record-keeping, capital-management, and management-reporting functions are often grouped under finance, although their theory and concepts are dissimilar. Computers, however, can supply management information quickly and separately from accounting records, and so this may lessen the disadvantage.

Divisional Organisation

Divisional organisation is the process of creating at the primary level a series of relatively autonomous units, usually based on product groupings as shown in Figure 6 (b) or geographical location as shown in Figure 6 (a). Within each division, the organisation may follow departmentation by function, as in Figure 5, or may follow further autonomous departmentation in the same way as the primary divisions.



(a)



(b)

Figure 6: Divisional organisation structure

Advantages: Divisional organisation is fast becoming the norm in large enterprises. Its advantages include the following:

1. It places responsibility for profits at the divisional level. The divisions are expected to contribute profits to the company rather than contribute to the profits of the company.
2. It thus focuses the vision and efforts of managers directly on business performance and business results.
3. It also provides a measurable training ground for future general managers because it tests them in independent command at an early age at a reasonably low level in the organisation.
4. Co-ordination of functional activities is made easier.
5. Growth and diversity of products and services is encouraged because separate autonomous divisions can be set up, and the success or failure of individual lines is revealed.

Disadvantages of the functional structure arise mainly with organisational growth:

1. Finding managers of the right calibre to head each division can be difficult.
2. Many services are duplicated that could be performed more economically in a centralised headquarters department, and
3. The direct control top management exercises over the organisation is reduced. (We shall discuss decentralisation on page 28).

Some large organisations in New Zealand have main divisions by products. Retail chains are typical of division by geographical location.

Although granting relative autonomy to division managers, top management must continue to exercise overall control. It usually does so by maintaining head office control departments for such services as finance, personnel and management services. In these staff roles, these departments provide support, guidelines, and usually functional authority over the specialists in the divisions.

They exercise control over such matters as:

1. Capital expenditure (over the monetary limit delegated to division managers, proposals require top management approval);
2. Accounting systems (which must be standardised);
3. Integration of personnel policies; and
4. Communications and computer systems (which must be integrated to ensure that vital information is available to top management).

Composite Departmentation

Below the primary level, as shown in Figure 7, many organisations have departmentation by one or more of the following:

1. Function
2. Product groups
3. Location: Insurance companies and banks are examples. Similarly, the sales function is often subdivided regionally.
4. Customer: Sometimes a function, usually sales, is subdivided according to kind of customer. For example, sales to industrial purchasers and sales to domestic purchasers might be handled by two separate sections.
5. Process and equipment: Often, the production function is subdivided according to kind of process involved or equipment used, because of the special knowledge and skills required or because some major equipment is so expensive that it must be kept working. In a sawmilling and joinery factory, for example, the kiln drying would be a major section of the production function because the high capital investment in the kilns and their limited capacity make it necessary to make full use of them.

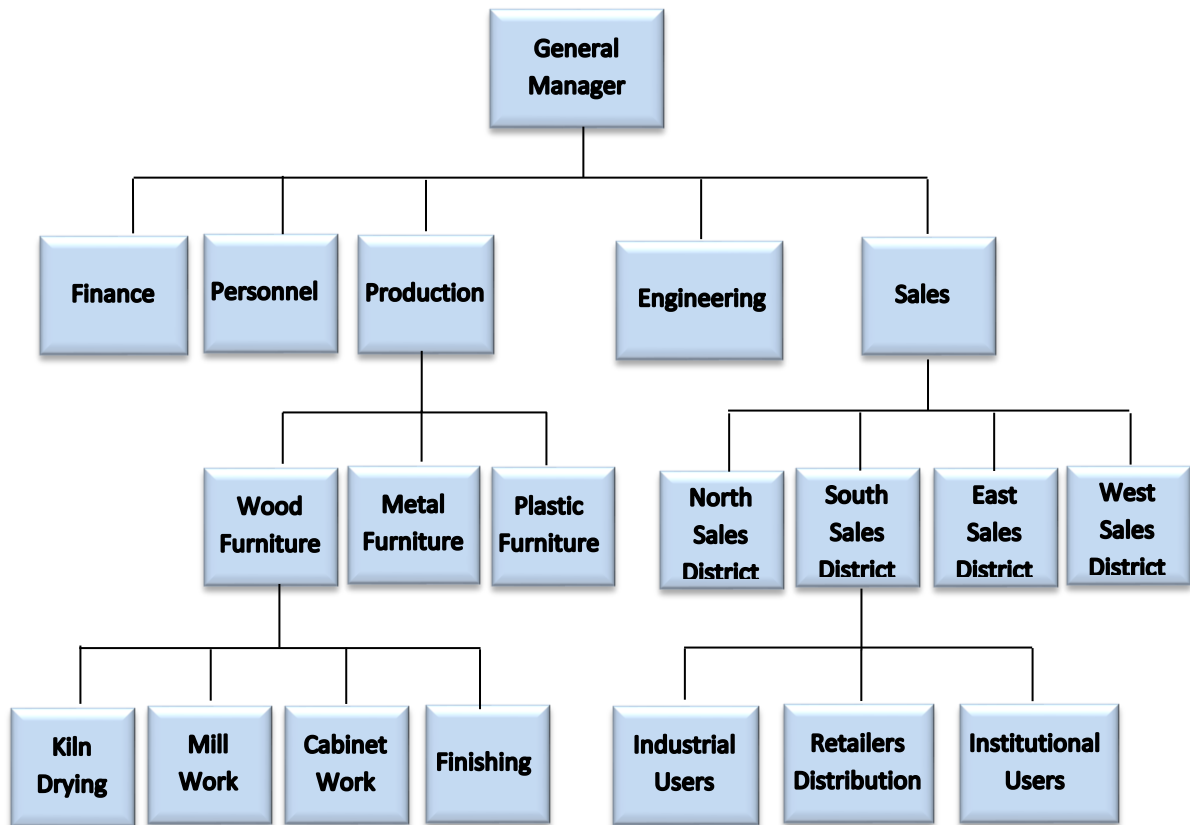


Figure 7: Composite organisation structure

In Figure 7, the production function is departmentalised on a product basis and within that by process. The sales division is subdivided by territory and then further subdivided by customer.

Matrix Structure

Matrix organisation, also called project or task force organisation, is a compromise between *functional* and *divisional* organisation. It is often used where large projects operate within an organisation, which require the assignment of experts from functional departments to work under the control of the project managers.

Figure 8 shows a matrix organisation for a large construction company that has several contracts to build commercial and industrial buildings. The company is organised by function, and each contract is placed under the control of a project manager.

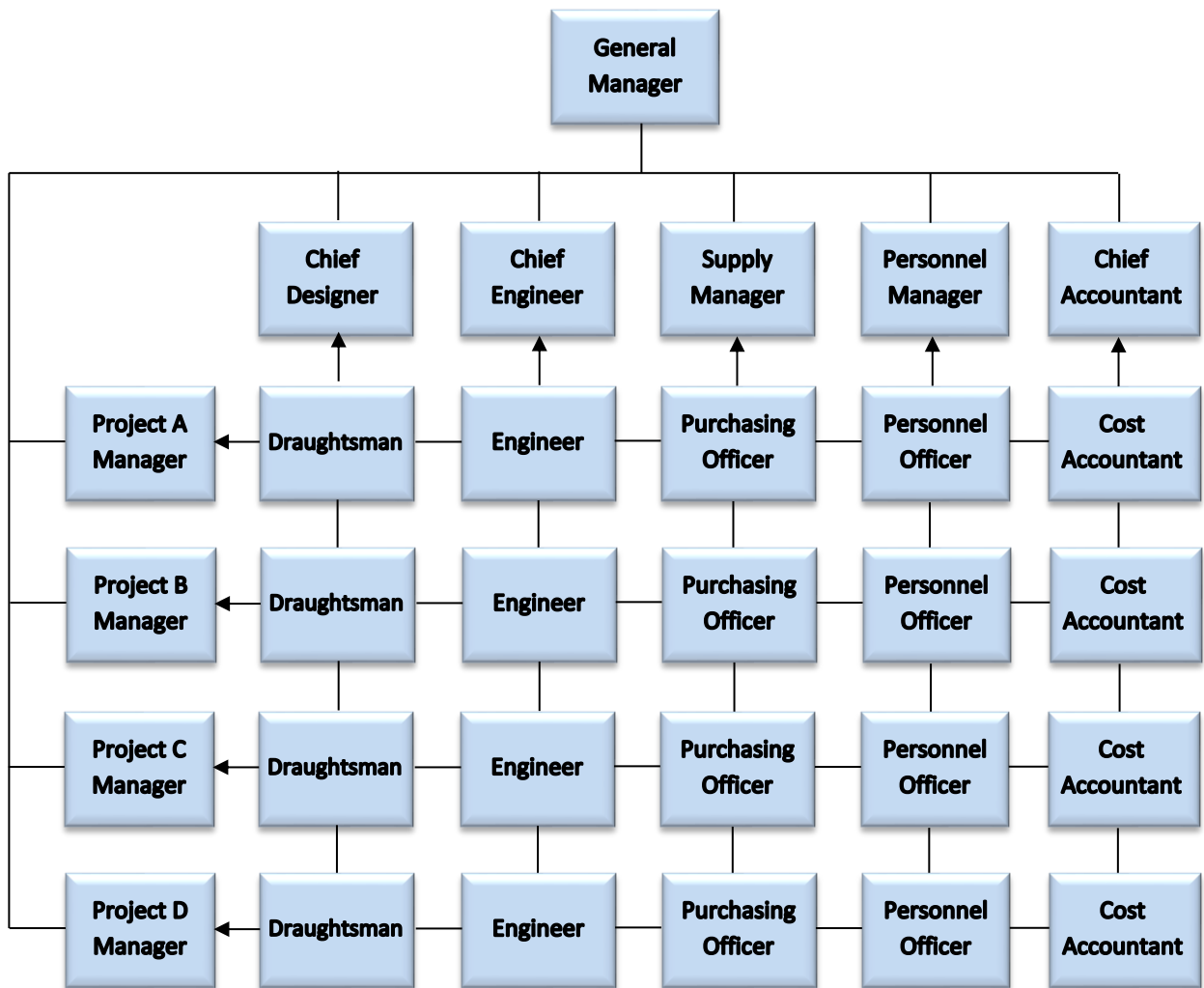


Figure 8: Matrix organisation

Figure 8 shows how the matrix effect is obtained, with each specialist reporting operationally to his project manager, to whom he has been seconded, and functionally to his department manager, who is his permanent boss. When the project is complete, the secondment terminates, and each specialist returns to the direct control of his functional manager.

Matrix organisations, in their many variations, are generally satisfactory, only when the project manager or equivalent is given direct authority over the personnel seconded to the project. Without that authority, he is little more than a co-ordinator or persuader and cannot control such matters as deadlines, quality of work, and costs of the project, for which he is held responsible – a most unhappy situation to be in.

SUMMARY

Before preparation of an organisation structure, the following questions must be answered.

1. What is the organisation trying to do?
2. What work must be done if these objectives are to be attained?
3. Which jobs or functions are best grouped together under a single boss?

Analysis of activities, decisions, and human relations requirements provides the information to answer those questions.

Organisations may be classified as

1. Public sector,
2. Commercial, or
3. Non-profit.

Departmentation is the process of grouping activities into units for administrative purposes. Structures most commonly adopted are

1. Functional,
2. Divisional, or
3. Composite, or
4. Matrix.

PRACTICE EXERCISE B

1. Distinguish between open and closed systems.
2. State the main difference between functional and divisional organisation.
3. What is meant by a *matrix structure*?

(Answers on page 38).

AUTHORITY, POWER, AND INFLUENCE

In lesson 1, we saw how some of the traditional management theorists considered authority and power. Influenced by the theories and practice of those and many others, we come to the way in which their concepts are regarded today.

Authority

Managerial authority is the right to act or to direct the action of others in the attainment of organisational objectives. It is possessed by all managers from chief executive to first line supervisor, to the degree that it has been delegated to each by his superiors. The chief executive derives his authority from the board of directors, the supervisor from his line manager.

Consider the statement that authority exists only when it is accepted by subordinates. In other words, if a person does not accept the authority of another to direct his efforts, the authority cannot be exercised, and this is true. If, however, a manager is acting within the limits of authority delegated to him by his superior, and he is instructing employees who are responsible directly to him, he can normally expect to receive from them acceptance of his authority.

Power

Power is the ability to exert influence over others. His possession of authority does not always mean that the manager has the power. If, for example, a manager acts in an unreasonable way that upsets his subordinates, his power diminishes from lack of willing support. Situations do arise when subordinates down tools and refuse to obey an instruction. Then, although the manager may possess the requisite authority to require subordinates to act on his direction, he has lost the power to do so.

Power may be obtained from various sources or circumstances. Consider the following:

1. Position power, which is derived from a person's position in the organisation;
2. Coercive power, based on the threat of penalties able to be imposed if instructions are disobeyed;
3. Reward power, based on the ability to reward others;
4. Expert power, based on the possession of superior technical knowledge, skills and ability;
5. Charismatic power, based on personal leadership characteristics, which can inspire others; and
6. Worker power, based on trade union strength.

A manager always possesses position power and may also possess power based on any or all of the others except worker power. Power may also be possessed by subordinates. For example, a subordinate may possess expert power superior to that of his boss, which enables him indirectly to exert influence.

Influence

Influence is associated with power. As we have seen, power is the ability to exert influence over others. Influence is thus the effect of power exerted. A person has been able to influence another when he has persuaded him to adopt the line of behaviour he wishes.

Every manager must, therefore, be able to distinguish between authority, power, and influence. He must be perceptive to the realities of every situation and realise that authority alone does not ensure that instructions will be followed without question. Power and influence reinforce authority.

PRINCIPLES OF DELEGATION

Before discussing delegation, you must consider two principles on which organisation is based.

The Scalar Principle

The *scalar principle* is that a line of authority flows from the top of an organisation down through the various levels of management to the lowest ranked employee. This line is the chain of direct authority relationships from superior to subordinate throughout the organisation. The *scalar chain* is sometimes called the *line of authority* or the *chain of command*. Subordinates must always know from whom their delegated authority comes and to whom matters that are beyond that authority must be referred.

Unity of Command

The principle of unity of command is that each participant in the formal organisation should be responsible to and receive orders from only one superior. This principle was first stated by Fayol about 1910, and in that stable time, could be followed. Today, it is not always practicable. In the line and staff organisation which will be discussed later in this assignment, a member may receive orders and instruction from both his line officer and staff officers. The matrix organisation also violates this principle of unity of command.

However, blatant violation of the principle should be avoided. If a manager gives orders or instructions to workers on the factory floor without going through the workers' foreman, this can reduce the authority of the foreman and will interface with the running of the foreman's department. If the manager often does so, the foreman is placed in an invidious position. He cannot run his department properly if he has too much interference from above.

Delegation

Delegation may be defined as the assignment by a manager of *responsibility* for work to a subordinate and the granting of adequate *authority* to enable it to be completed. Delegation is an essential part of management. Every person in an organisation has been delegated responsibility from his superior for the tasks assigned to him. Most of these tasks are his regular work. Others may be special tasks delegated by an overloaded manager.

In discussing the principles of delegation, you must understand the terms

1. Authority,
2. Responsibility, and
3. Accountability.

Authority: We have seen that authority is granted by means of the scalar chain, each manager delegating to subordinates the authority each person needs to carry out the tasks assigned to him.

Responsibility: As we have seen, the manager assigns to subordinates responsibility for specific work or tasks. By so doing, however, he cannot assign the responsibility he has to his superior. He remains responsible for the achievement of the work assigned, while his subordinate is responsible to him.

Responsibility assigned to a subordinate must be accompanied by the delegation of adequate authority to enable the subordinate to do the tasks for which he has been made responsible.

Accountability: The assigning of responsibility for tasks and the delegation of the requisite authority to carry them out creates an obligation for the subordinate. He becomes accountable to his manager or supervisor for the satisfactory completion of those tasks. The principle of accountability travels up the scalar chain, each person being fully accountable to his immediate superior for the responsibilities assigned and authority delegated to him.

Because the manager is accountable to his superior, he cannot afford to assign responsibility and delegate authority to subordinates and then forget about it. Into assigned responsibility, he must build provision for adequate feedback of progress. This is the control mechanism that he needs to ensure that his overall responsibilities, for which he is accountable to his superior, are being fulfilled.

Span of Control

The span of control is the number of subordinates reporting directly to a superior.

The ideal number of subordinates reporting to one superior is difficult to determine. In deciding on a span of control, a manager must weigh

1. The complexity of the superior's responsibilities,
2. The superior's willingness and ability to delegate,
3. The demands on the superior's time, and
4. The ability and competence of the subordinates.

The more routine the subordinate tasks are, the more subordinates the superior can supervise, as each individual requires little attention. If staff are capable and well trained, they need little supervision. This last point highlights the need for competent well-trained staff. With the kind of staff, the executive's and supervisor's jobs are much simplified.

Another influence on the span of control is that continual close supervision tends to reduce employee morale. The narrower a manager's span of control, the more closely, in general, the subordinates are controlled. Most people dislike being closely supervised, and so a narrow span of control can lead to lower morale.

In one study of nearly 300 salesmen in three organisations, salesmen whose managers had wide spans reported that they were more satisfied, under less stress, and able to perform better than salesmen whose managers had narrow spans.

Tall versus Flat Organisation Structure

Organisation structures can be tall, with many levels of authority, or flat, with few levels.

Whether an organisation has a tall or a flat hierarchy of authority depends on the span of control.

The advantages of one form over another are debatable. Tall structures provide closer supervision and tighter boss-oriented controls – with higher supervisory costs. Co-ordination and communication, however, become more difficult because of the increased number of layers through which directives must go.

Flat structures have a shorter and more simple communication chain, but less opportunity for adequate supervision in that each manager has more people reporting to him. Flat structures also mean fewer promotion opportunities as a result of fewer levels of management.

Because of the vast improvements in quantity, quality, and speed of information that computers are making available to top management, spans of control are expected to increase, resulting in flatter management structures.

Middle management is likely to be most affected. When senior managers can be provided quickly, from computer reports, with the management information they need to make decisions, middle managers' services are going to become less essential to the efficient operation of many organisations.

SUMMARY

Managerial authority is the right to act or direct the action of others in the attainment of organisational objectives.

Power is the ability to exert influence over others.

Influence is the effect of exerting power.

The scalar chain is the line of authority extending from the top of an organisation through all management levels down to the lowest ranked employee.

Unity of command requires every employee to be responsible to and to receive orders from only one superior. In complex organisations today, this is not always possible, but exceptions should be kept to the minimum.

Delegation is the assignment by a manager of responsibility for tasks to a subordinate, and the granting of adequate authority to enable them to be completed. Note the meaning of the terms authority, responsibility and accountability in this context.

Span of control is the number of subordinates reporting directly to a superior.

Tall organisations have many levels of authority and narrow spans of control. A flat organisation has fewer levels of authority and wider spans of control.

PRACTICE EXERCISE C

1. From whom does an employee obtain authority to act?
2. Give an example of one sort of power a subordinate may be in a position to exercise over his manager.
3. What is the chain of command?
4. Why is the practice of delegation important?

(Answers on page 38).

LINE AND STAFF RELATIONSHIPS

We have discussed authority being delegated down the *line*, through various levels of management. When we discussed departmentation, we saw examples in Figures 5 and 6 of *line* organisations. The *scalar principle* helps us to understand the line organisation, which we find in all small organisations. Large organisations, however, need people to provide specialist skills to assist line management. These are called *staff* personnel and together they form the staff organisation, which operates alongside the line organisation.

You will recall from lesson 1, the contributions of Lyndall Urwick were discussed and the principles of *line* and *staff* functions explained. At this stage you should re-read that section.

We seldom see the pure form of lone and staff relationships, where line is responsible for carrying out the work of the organisation and has all the authority, and where staff are specialists who simply give advice or guidance. On occasion, both line and staff officers must accept *functional authority*.

Functional Authority

The word function (or functional) has various meanings in organisation, but it generally implies specialisation. Functional authority is therefore authority that may be granted to an individual or department in relation to a special process, procedure, or other activity. It may be granted to a staff officer or to a line officer over personnel outside his own department.

Staff and functional authority: Staff specialists can recommend, but they cannot command the acceptance of their recommendations. In practice, line personnel do tend to follow staff recommendations. They may respect the specialists knowledge and experience of the staff officer, or they may not want the responsibility of having to account for any trouble arising from having disregarded the advice. Again, they may know a refusal could result in the staff officer's persuading some higher line executive to impose the advice as a command. Thus, the influence of staff on the lower levels of operating personnel can be very strong, even without formal authority.

In some matters, however, uniformity is most desirable, and functional authority is often conferred on staff officers, giving them direct authority over line personnel but only in relation to some specific limited function. For example, the chief executive might confer functional authority on the personnel manager to negotiate settlement of minor grievances instead of merely making recommendations to line executives.

A more common example is that of the functional authority given to accounting staff to prescribe the form of accounting records to be kept throughout the organisation so that the accounting system may be uniform. The adoption by each works manager of a different costing system, a different way of calculating depreciation, a different form of stock records, and so on would not be satisfactory.

Line and functional authority: Remember that functional authority arises from the position held and the duties it requires, regardless of whether the position is line or staff. A line executive may therefore have functional authority over procedures or processes in another line department. For example, a production manager may have functional authority over all safety measures in the whole organisation.

Functional authority is a direct invasion of the authority of the line executive. It should therefore be used sparingly and be clearly defined so that it is understood by all concerned.

Figure 9 is part of the organisation chart of a line and staff organisation. You may find staff positions at various levels in an organisation. Figure 9 shows the personnel manager and the planning and development manager at the primary level. Their jobs are to assist line managers and report to the managing director. The engineering manager and the chief accountant are also staff officers but at the middle management level. All of these staff positions may carry functional authority as well as giving advice and assistance to line managers.

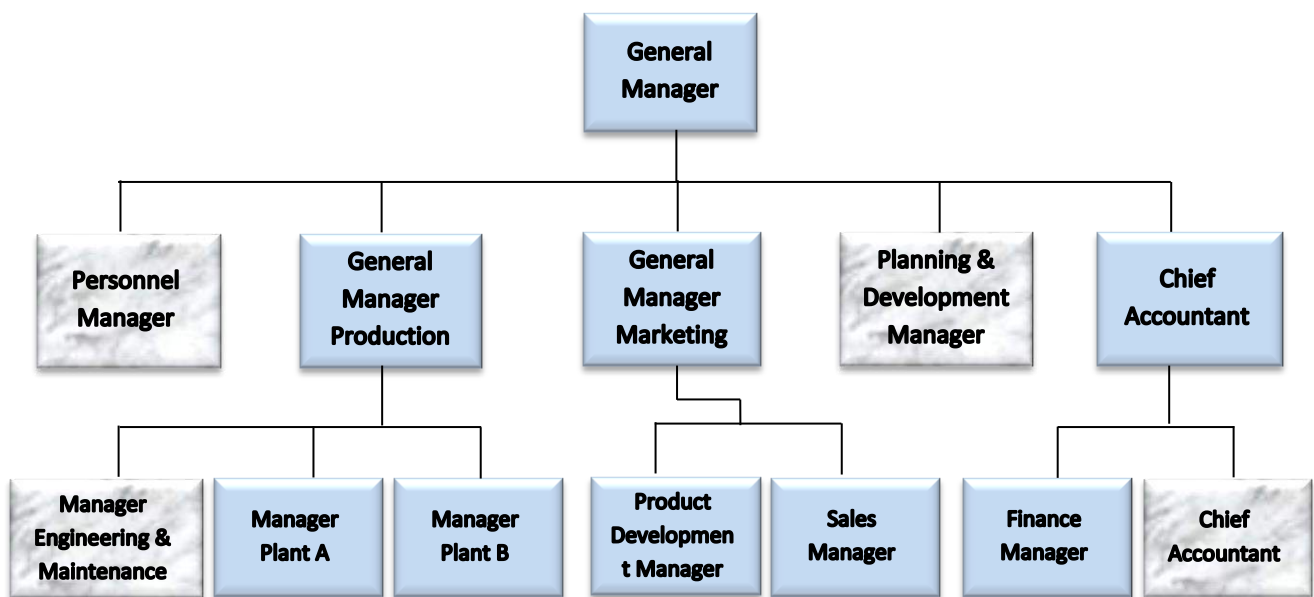


Figure 9: Line and staff organisation (staff positions shaded)

SUMMARY

Define *line/staff* from the viewpoint of functions in the organisation or from the viewpoint of organisational authority relationships.

From the functional viewpoint, the executives engaged in fulfilling the firm's main function – general manager, production manager, sales manager, and so on – have line functions. Other executives, for example, personnel manager and research director, form part of the staff function.

From the authority viewpoint, line officials have direct authority over those to whom directions are given, whereas staff officers can advise and recommend but have no authority to command.

Functional authority is authority given to staff or line executives over specific processes, procedures, or policies throughout the organisation. It is, in effect, an invasion of the line executive's powers and should therefore be used sparingly and be carefully defined.

PRACTICE EXERCISED

1. Who may exercise functional authority?
2. Show how the chief accountant in an organisation could exercise staff, line and functional authority.
3. What are two ways in which staff views can be implemented?

(Answers on page 38).

DECENTRALISATION

Decentralisation may be defined as the delegation of decision-making authority by top management to lower level managers.

In a highly decentralised organisation, top management freely delegates decision-making to subordinates, usually primary level managers. In a centralised organisation, the decision-making is largely retained by top management.

Almost all small organisations are centralised, as top management can keep its fingers on the pulse of all activities. As an enterprise increases in size or in the complexity of its operations, top management has less time to devote to the full control of all activities and usually considers decentralisation to a greater or lesser degree.

Under departmentation, we examined functional and divisional organisation structures. By its nature, a functional structure indicates a centralised organisation, with functional managers keeping top management informed about all important matters, enabling decisions to be made at top level. A divisional structure is the basis for decentralised management. All divisional structures, however, may not necessarily be decentralised organisations. Decentralisation is determined by the extent of decision-making delegated by top management.

You can have a divisional structure where managers are not permitted to make decisions of any importance. Where division is by geographical location, for example, a branch manager may have no authority to grant customer credit outside the limits set for each customer by the credit manager at head office. Here, control is centralised.

Conversely, a large organisation may be divisionally structured over product groupings, with each division manager delegated full authority over purchasing, production, marketing, distribution, and credit for his range of products. This is decentralisation, with division managers enjoying relative autonomy.

Top management would retain overall control by requiring division managers to work within approved budgets and report only in respect of profits earned and return on capital employed. Top managers would also retain control over such matters as capital expenditure, where a rash decision by a division manager could put the whole organisation at risk.

Centralisation v. Decentralisation

Between the two extremes of total centralisation and total decentralisation are many differing degrees of each, or combinations of both. Top management must decide how far to go in delegating decision-making authority to subordinates and how such delegation will suit the particular organisation.

Key points that managers must take into account when considering decentralisation include

1. The type of business engaged in, which may or may not be suitable for decentralisation;
2. The business climate;

3. The adequacy of the time top management can devote to detailed control; and
4. The calibre of senior managers, to whom decision-making authority may be delegated.

Table 1 shows advantages and disadvantages of both sorts of organisation.

TABLE 1

Centralised and Decentralised Organisations

| ADVANTAGES | DISADVANTAGES |
|---|---|
| <i>Centralised Organisations</i> | |
| Uniformity of standards and activities among units Talents of outstanding executives available to the entire organisation Uniformity of decisions Consistency of operating Elimination of overlapping or duplicated activities | Communication lines stretched to breaking point Excessive demands on executives' time Concentration of authority in a few hands exaggerates personal power and influence Top executives forced to develop breadth of interest beyond their capacity |
| <i>Decentralised Organisations</i> | |
| More manageable scope of operations Development of more executives capable of top management Shortening lines of communication and authority, thus increasing efficiency Decision making vested in individuals closest to situations Creation of more chains of promotion | Lack of uniformity in policy and procedures Difficulty in finding executives able and willing to assume primary responsibility Acceptance of second-rate executives in top jobs simply because they are available and in line Poor co-ordination between decentralised units Inter-unit rivalry interfering with operations |

Factors Favouring Decentralisation

In considering whether decentralisation is desirable, and if so to what extent, top management looks at the following:

1. *Size of the organisation*: Decentralisation may be needed when the organisation becomes so big that it is unwieldy, cumbersome, or uncontrolled as a single unit, as
 - (a) Size results in top management becoming overloaded with decision making,
 - (b) The delay in securing decisions causes unduly slow response to changing situations,
 - (c) Detailed remote control from an over-burdened head office results in frustration and lowered morale, and
 - (d) Decisions made without full local knowledge often prove to be unwise ones.
2. *High rate of expansion*: A company in a rapidly expanding field must make many important decisions to cope with change and expansion. Decentralisation is necessary to avoid over-burdening top management, even at the risk of subordinates making errors. At least, in making mistakes they will learn and develop, and the development of able executives is especially important in an expanding industry.
3. *Geographical location*: If the various organisational units are separated by distance, for example, factories are in different cities, then decentralisation can be helpful. Decisions can be made on the spot instead of having to be referred to head office.
4. *Availability of controls*: Decentralisation is successful only when head office keeps overall control of policy. To decentralise does not mean to lose control but to control the important matters instead of the unimportant matters. Control is maintained by using suitable statistics, accounting methods, and budgetary control so that the overall functioning of each unit is continuously under review.

Top management also takes into account the calibre of current employees who would occupy the new senior management positions that are likely to be created.

Factors Favouring Centralisation

In large size favours decentralisation, then small size favours centralisation. Apart from that, however, top management considers the following:

1. *A need for uniform policy in some functions throughout the organisation*: Sometimes, centralisation is applied only to those functions where uniform policy is required, for example, accounting or personnel, and other functions are decentralised.
2. *In time of business decline or emergency*: Top managers must accept an unusual degree of overloading for the sake of spreading their knowledge and experience throughout the organisation.

A business in decline has different problems from those of an expanding business. Instead of taking on new staff and planning new ventures, a declining business may need to eliminate excess staff positions and utilise fully the central executive. In any emergency, strong central authority is essential.

3. During major restructuring of an organisation, as the result of a merger, takeover, or re-organisation, centralised direction is needed until the new policies and procedures become familiar.
4. To utilise a computer: During the 1960s, companies tended to recentralise. This does not, however, seem to be entirely or even largely due to the introduction of computers. Top executives often do not have enough time to use all the information now available to them, and the problem is often to find ways of reducing it to a more manageable volume. In theory at least, the information facilities now available, enable even a very large and far-reaching organisation to be controlled from a central point, particularly if the various divisions of the organisations all carry out the same sort of work.

A computer can, however, make decentralisation easier by making information more quickly available to branches, thereby enabling better decisions to be made locally.

Decentralisation of Various Functions

Let us consider the extent to which the following functions may be decentralised:

1. Production is usually the first and easiest function to decentralise. Authority may be delegated to a works manager or production manager, whereas overall control is maintained through the techniques of production and budgetary control.
2. Finance is usually the least decentralised of all functions because of the need to safe-guard the capital of the company. Each manager is usually required to secure approval for capital expenditure over a predetermined amount. Operating expenditures must accord with an approved budget.
3. Sales: Decentralisation of the sales function is sometimes more apparent than real in that head office may control the range of products, prices, discounts, credit policy, and even selling techniques. Sales promotion, market research, advertising, and publicity are also usually centralised so as to utilise full-time specialists at headquarters.
4. Accounting is nearly always centralised to ensure that the accounts of all divisions are kept on a uniform basis. When an organisation has divisions that are decentralised, there will be decentralised accounting functions, but they will use techniques laid down by the central office.
5. Personnel: Usually, by some decentralisation in the personnel function, divisional managers have power to engage staff as is needed. However, the need to bargain collectively with national unions and to comply with national awards, results in wage rates and conditions being largely outside the control of divisional managers. Procedures for induction and training are set by head office.

6. *Purchasing*: the extent of decentralisation of purchasing depends on the particular circumstances of the organisation. In a merchandising organisation, purchasing is usually centralised for economy in bulk buying. The same applies to the purchase of raw materials for a manufacturing organisation if all factories engage in the same activity. If they engage in entirely different activities, then decentralisation is necessary.

Bear in mind that decentralisation is not achieved simply by top management having a stated policy of decentralisation or even drawing up an organisation chart showing a decentralised structure. The only way to see whether an organisation is decentralised or not is to look at the importance of the decisions made at lower levels and the freedom granted to make and implement those decisions.

SUMMARY

Decentralisation of authority means the delegation of authority to a greater extent than is customary so that, at lower managerial levels

1. More decisions are made,
2. Decisions of greater importance are made,
3. More different functions are controlled, and
4. Less checking of decisions is done.

Both the centralisation and decentralisation have advantages and disadvantages. The manager's aim is a structure that avoids the limitations of each extreme.

Factors favouring decentralisation include the size of the organisation, a high rate of expansion, geographical separation of units, and the availability of suitable controls. Centralisation is favoured in times of emergency, business decline, or restructuring, when uniform policy and strong direction are needed. The use of computers, however, has enabled adequate control of decentralised organisations to be exercised by top management without changing the structure.

Among the common functions of a business, production and to some extent, personnel lend themselves most easily to decentralisation, and finance and accounting lend themselves to centralisation.

PRACTICE EXERCISE E

1. What is meant by decentralisation?
2. What are five advantages of decentralisation?
3. What signs indicate that an organisation has become so big that it needs decentralisation?

(Answers on page 39).

MODERN ORGANISATION STRUCTURES

The organisation structures we have examined have served management well in the past. The traditional bureaucratic organisation, on which they have been based, is being found increasingly unsatisfactory for some of the complex problems facing today's top management. The traditional organisations are sometimes called closed structures because they incorporate fixed relationships.

Many organisations, needing more flexibility and adaptability to change, need more open structures than are obtainable from the traditional forms of organisation.

Technology and Organisation

The impact of science and new technology on industry and commerce in the last few years has been such that existing organisation structures have been found inadequate to cope with the revised needs of top management.

Sometimes, technological change can affect whole industries, for example, the watch industry. The new electronic watches based on the qualities of the quartz crystal have revolutionised watch-making. The development of the digital quartz watch, and also of traditional watches in which the old mechanical systems have been replaced by the electronic systems, give a high degree of time-keeping accuracy and can now be produced very cheaply.

American and Japanese watch companies have captured a major share of the international watch market from the formerly dominant Swiss companies.

The change from clockwork to electronic quartz watches has resulted in considerable changes in the organisation of traditional watch companies. New techniques were adopted to manufacture the electronic quartz watch, which as five times as many transistors as a portable radio. The old skills of watchmaking are no longer needed, and workers have had to be trained in the new techniques. Some older workers have difficulty adapting to this change and in learning the new skills. This may result in an upheaval in the status and social structure in the organisation.

The introduction of shipping containers for cargo and of specially designed ships to transport containers is another instance of an industry being transformed by technology changes. This change has resulted in upheavals in the organisation and activities of many, including shipping company employees, waterside workers, and rail and road transport operators.

Industrial technology: Large-scale organisations have become the primary mechanism for the creation of, and utilisation of, industrial technology. The modern large corporation is adapted to the needs of advanced technology and the large amounts of capital and comprehensive planning that this requires. In many cases, electronically controlled automated processes have reduced the number of unskilled workers required.

By adapting to, and making the best of, new technology, the corporation has developed the means for growth and diversification, thereby expanding its role in society. This movement towards technological mastery has been implemented by the growing number of highly trained researchers, professional and technical personnel in corporations, who are aggressively seeking outlets for their creativity. This

utilisation of technology, as well as its impact on the goals and internal structure of the corporation, has an important bearing on its relationships with other organisations.

Impact of Technology on People

The impact of new technology on people is severe. New technology based on the silicon chip is going to bring about a reduction in the need for unskilled or semi-skilled labour. At the same time, the need is increasing for qualified technical, professional, and scientific personnel to make the best use of the new technology.

To cope with the new technology, the calibre of employees of technology-oriented organisations must improve, and in time that of the whole labour pool of the country must also improve.

Organisations with a higher calibre workforce are going to be in a better position to respond to the industrial and commercial challenges of the future.

Impact of Technology on Structure

Among studies of the relationship between technology and organisation structure, the findings of Joan Woodward, who published her *Industrial Organisation* in 1965, are still useful. She studied about 100 British firms that she classified as

1. Unit and small batch production,
2. Large batch and mass production, or
3. Process or continuous flow production.

Woodward found that among the organisational characteristics showing a direct relationship with technical advance were

1. Length of line of command,
2. Span of control of chief executive,
3. The percentage of total turnover allocated to the payment of wages and salaries,
4. The ratio of managers to total personnel,
5. The ratios of clerical and administrative staff to manual workers,
6. The ratio of direct to indirect workers, and
7. The ratio of graduate to non-graduate supervision in production departments.

The size of the management group gave a better indication of the size of a firm than the total number of employees. Some of the firms studied, although employing few people, had all the other characteristics of large companies, including a well-developed management structure, considerable financial resources,

long-term planning, generous employee services, and a highly paid executive staff. This was particularly true of the 25 process-production firms.

These firms had more managers and supervisors, and they were also better qualified. Of these 25 process firms, 20 employed graduates of line management. Of the 15 firms operating regular and systematic management training courses, 12 were process firms.

This ties in with the researchers' findings that individual managers differed considerably in their ability and willingness to delegate responsibility for decision making to their subordinates. Nevertheless, in spite of individual differences, there was more delegation and decentralisation in process industry than in large batch and mass-production industry.

The impact of computer technology on organisations may affect the above findings, but no definitive research on this aspect has yet been published.

Management Systems

By a new concept for classifying industrial organisations, as developed by Burns and Stalker, firms are said to establish, through following two fundamentally different organisational procedures, either a mechanistic system or an organic system.

The mechanistic system is similar to the bureaucratic system we covered in Lesson 1.

Organic systems are more adaptable in that jobs lose much of their formal definition, and communications up and down the hierarchy are more in the nature of consultation than of the passing up of information and the receiving of orders.

Organic systems tend to predominate in the production categories at the extremes of the technical scale, whereas mechanistic systems tend to predominate in the middle ranges. The tight production and control procedures needed for large batch and mass production force a tight control over the whole organisation.

Stable v. Unstable Technology

Burns and Stalker first propounded their organic and mechanistic systems when investigating companies that were in the process of technological changes. They found that the mechanistic system was most suitable for firms in a stable technology and environment, and the organic system was most suitable for firms in a stable technology and environment, and the organic system was most suitable for unstable conditions when problems and requirements for action arise that cannot be broken down and distributed among specialised roles within a clearly defined hierarchy.

The organic system is characterised by

1. A relatively flexible structure,
2. Continual adjustment and redefinition of individual tasks through interaction with others,
3. A network rather than a hierarchical system,

4. Emphasis upon lateral rather than vertical communications, and
5. A wide dispersal of power and influence based on technical expertise and knowledge rather than on hierarchical position.

Firms moving from a stable to a dynamic technology found that, often, their managers could not adapt to the uncertainty inherent in a dynamic technology. They had become conditioned to operating in the highly structured mechanistic system suitable to a stable organisation in a stable technological environment.

Programme/Project Management Departmentation

Most organisational charts are drawn to emphasise the vertical hierarchy and superior-subordinate relationships, and very few indicate horizontal relationships, that is, interactions between departments, units, and individuals at approximately the same level. Nevertheless, as organisations become more complex, they depend increasingly on lateral relationships because specialised points of view and required contacts are so many that no single manager can handle the communication flow alone.

Establishing effective means of dealing with the problems of horizontal integration is perhaps the single most important problem in complex organisations. Traditionally, lateral communications have been left to the informal organisation, but as the problems of integration have increased, the trend has been to develop formal means to supplement the informal relationships. This approach is called *programme management, systems management, project management, or product management*. Although these terms may differ slightly in meaning, they all indicate the integrated management of a specific programme on a systems basis.

Approaches to programme management: A programme manager is responsible for controlling and organising all activities in achieving the ultimate objective. He is usually superimposed on the functional organisation, creating a new set of complex relationships.

The various approaches to project or programme management are as follows:

1. In the *staff* form, the programme manager is an adviser to the chief executive or general manager. He has little authority on his own, and the functional managers retain the primary authority.
2. In the *pure project* form at the other end of the spectrum, the programme manager is given complete authority over all the activities necessary to carry out the programme. This is the approach used in many major military or space projects in the United States.
3. In the matrix form, which is a compromise between these two extremes, the functional managers are responsible to the general manager for their special activities. The programme or project managers report directly to the general manager on a line basis, and they may have personnel assigned to their projects from the various functional departments. Figure 8 on page 17 shows that, under the matrix form, the two primary flows of authority are the vertical flow of authority from the various functional managers and the horizontal flow of project authority.

We discussed the matrix form of organisation on page 16.

The final characteristic of the project manager's task is that it is finite, that is, temporary. He takes a project from its inception and works it through to completion. Once completed, his task is over, and the programme-management group can be assigned to new tasks. The dynamic and temporary nature of this structure has built-in human-relations problems because conflicts often arise between programme and functional managers.

SUMMARY

Science and technology are very powerful forces of change in today's society. Where technology has transformed whole industries, new skills have had to be learned, and the changes have probably resulted in an upheaval in the status and social structure of the workers inside and outside these industries.

The workforce has been considerably changed by the new technology. Much of the heavy work previously done by labourers is now done by machine, and much of the boring repetitive work found in large-batch and mass-production industries is now done by electronically-controlled automated processes. The new technology demands highly trained scientists, and professional and technical personnel.

The technology of the organisation can also affect its structure. Large-batch and mass-production industry demand a very tight control at all stages of the production process, and this forces tight control over the whole organisation. Process industries can operate better with a more open organisation.

Whether an organisation is in a stable or dynamic industry can also affect its structure. In a stable industry, the mechanistic form of organisation is suitable, but in a dynamic industry, greater flexibility is needed to deal with the rapid changes that are taking place.

Some form of informal horizontal relationships are present in all complex organisations in the form of committees, working parties, and task teams used in specific programmes or projects.

With the growth in the size and complexity of organisations, many organisations with traditional structures will turn to programme management with consequent structural rearrangements.

The project manager's authority may be in a continuous form from a purely staff function to complete authority for all activities necessary to carry out the project. Between these is the matrix form of organisation with both vertical and horizontal authority flows. This raises problems of conflict between project and functional managers so that the project manager must depend for success on influence as well as formal authority.

PRACTICE EXERCISE F

1. What are the technological developments that have transformed:
 - (a) The watch industry, and
 - (b) The cargo shipping industry?

2. What impact has new technology had on the workforce?

3. Name the two organisation systems propounded by Burns and Stalker, and indicate when each is suitable?

(Answers on page 39).

ANSWERS TO PRACTICE EXERCISES

EXERCISE A

1. (a) Structures, people, and technology.
(b) The methods used by manmade systems to accomplish organisational tasks.
(c) Environmental influences.

EXERCISE B

1. A *closed* system is self-contained, whereas an open system is one in a dynamic interaction with its environment.
2. A *functional* organisation is structured at the primary level by functions such as production, marketing, and finance, whereas a *divisional* organisation is structured at the primary level by semiautonomous units, usually based on product groupings or geographical locations.
3. Where employees who normally respond to their functional manager are made responsible to a project manager are made responsible to a project manager for the period of that project, the organisation is a *matrix structure*.

EXERCISE C

1. From his immediate superior.
2. Expert power – superior technical knowledge. In some circumstances, charismatic power and worker power may be applied.
3. The scalar chain or line of authority through the various levels from the top to the bottom of an organisation.
4. It allows a manager to reduce his own workload by assigning work responsibilities to subordinates and so to help them to develop.

EXERCISE D

1. Functional authority may be given to both line and staff personnel for different functions.
2. A chief accountant in a firm might give taxation and accounting advice (staff) to the chief line officer, supervise his own accounting department of, say, 20 employees (line), and set specific accounting procedures for all departments with his own functional authority.
3. (a) By being accepted by line officers and issued as commands, or
(b) By the staff officers being given functional authority in that particular area.

EXERCISE E

1. The delegation by top management of decision-making authority to lower level managers.
2.
 - (a) More manageable scope of operations,
 - (b) Development of more potential top managers,
 - (c) Shorter lines of authority and communication,
 - (d) Decision making closer to the actual situation, and
 - (e) More chains of promotion.
3.
 - (a) Top management is overloaded with decisions,
 - (b) Delay in obtaining decisions slows response to changing situations,
 - (c) Remote control causes frustration and lowered morale, and,
 - (d) Unwise decisions result from lack of local knowledge.

EXERCISE F

1.
 - (a) The quartz crystal and electronics.
 - (b) Containerisation.
2.
 - (a) An increase in the number of scientists and professional and technical personal required, and
 - (b) A reduction in the number of unskilled and semi-skilled personnel required.
3.
 - (a) Mechanistic, used when technology and environment are stable; and
 - (b) Organic, used when conditions are unstable, and the mechanistic hierarchical system cannot successfully cope with requirements and problems.