NATIONAL OPEN UNIVERSITY OF NIGERIA

SCHOOL OF MANAGEMENT SCIENCES

COURSE CODE: ENT 313

COURSE TITLE: CORPORATE PLANNING

COURSE GUIDE

ENT 313
CORPORATE PLANNING

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INTRODUCTION

ENT 313: Corporate Planning is a first semester year three, two-credit and 300 level core course. It will be available for all students offering the undergraduate programme in B.Sc. Entrepreneurial and Business Management at the School of Management Sciences.

This course is an introduction to corporate planning with tools and techniques available to managers toward achieving organisational effectiveness. In this course, you will be exposed the basic tools and techniques available to managers for planning and decision making. The course will also cover a number of topics including the functions of planning, necessity for planning, importance of planning, problems solving in organisational planning issues such as capital budgeting, new product launches and acquisition. The role of a corporate planner as a staff specialist and his relationship with line managers, actual planning function and problems through the use of appropriate case materials are also discussed in this course.

The course guide tells you briefly what the course is about, what course materials you will be using and how you can work your way through the study materials. It suggests some general guidelines for the amount of time you are likely to spend on each unit of the course in order to complete it successfully. It provides guidance on your tutor-marked assignments, which will be made available to you at the Study Centre. There are regular tutorial classes that are linked to the course. You are advised to attend these sessions.

WHAT YOU WILL LEARN IN THIS COURSE

ENT 313: Corporate Planning consists of four modules made up of 17 units. Specifically, the course discusses the following:

- overview of management as science, theory and practice
- planning as an important management function
- corporate planning and strategic planning
- objectives- foundation of planning
- classification of planning
- steps in planning
- decision making I
- decision making II
- management by objectives
- premising and forecasting
- operational planning tools I – budget
- operational planning tools II

- operational planning tools III
- operational planning tools IV
- case studies/ applications

COURSE AIMS

This course aims to give you an understanding of the meaning of corporate planning and how the theories and concepts can be applied in business operations. It also aims to help you develop knowledge of tools and techniques available for managers in planning for organisational effectiveness. This course will expose you to the required knowledge and skills that you are expected to exhibit as a corporate planner, an entrepreneur, a teacher in private and public educational institutions.

COURSE OBJECTIVES

To achieve the aims set out, the course has overall objectives. Each unit also has specific objectives. The unit objectives are always specified at the beginning of a unit; you should read them before you start working through the unit. You may want to refer to them during your study of the unit to check your progress.

Below are the overall objectives of the course. By meeting these objectives, you should have achieved the aims of the course as a whole. On successful completion of the course, you should be able to:

- explain the relationship between planning and organisational performance
- define corporate planning
- explain why do corporate plan fail and what can be done to ensure its success
- explain when should a strategic plan be made
- define objectives and why are they considered the foundation of planning
- identify an organisation's stated objectives
- define the concept of brainstorming
- list the characteristics of decision making under the condition of certainty

WORKING THROUGH THIS COURSE

To complete this course, you are required to read the study units, read set books and read other materials provided by the National Open University of Nigeria (NOUN). Each unit contains self-assessment

exercises, and at a point in this course, you are required to submit assignments for assessment purposes. At the end of the course, there will be a final examination. The course should take you a total of 16 – 17 weeks to complete.

Below, you will find listed all the components of the course. What you have to do and how you should allocate your time to each unit in order to complete the course successfully on time.

The list of all the components of the course is as presented.

COURSE MATERIALS

Major components of the course are:

- Course Guide
- Study Units
- Textbooks and References
- Assignment File
- Presentation Schedule

STUDY UNITS

The study units in this course are as follows.

Module 1 Planning As a Vital Function of Management

Unit 1 Overview of Management as Science, Theory and Practice
Unit 2 Planning as an important Management Function
Unit 3 Corporate Planning, Strategic Planning and Corporate Strategy Compared
Unit 4 Objectives: The Foundation of Planning
Unit 5 Classification of Planning
Unit 6 Steps in Planning

Model 2 Essentials of Planning and Managing by Objectives

Unit 1 Decision Making I
Unit 2 Decision Making II
Unit 3 Management by Objectives
Unit 4 Premising and Forecasting

Module 3 Planning Tools and Techniques

Unit 1 Operational Planning Tools I – Budget
Unit 2 Operational Planning Tools II
Unit 3 Operational Planning Tools III
Unit 4 Operational Planning Tools IV

Module 4 Case Studies/Applications

Unit 1 Essentials of Planning
Unit 2 Decision Making
Unit 3 Planning Tools and Techniques

ASSIGNMENT FILESS

There are many self-assessment exercises included in this course. These exercises will enable you understand the course.

PRESENTATION SCHEDULE

The presentation schedule included in your course materials consists of dates for the completion of the tutor-marked assignments (TMAs) and tutorials. Remember, you are required to submit all your assignments by the due date. You should guard against lagging behind in your work.

ASSESSMENTS

There are two aspects to the assessment of the course: self-assessment exercises and the tutor-marked assignments. There is also a written examination at the end of this course. In tackling the assignments, you are expected to apply information, knowledge and techniques gathered during the course. The assignments must be submitted to your tutor for formal assessment in accordance with the deadlines stated in the presentation schedule and the assignment file. The work you submitted to your tutor will count for 30 per cent of your total course mark.

At the end of the course, you will need to sit for a final written examination of 'three hours' duration. This examination will also count for 70 per cent of your total course mark.

TUTOR-MARKED ASSIGNMENT

Each unit in this course has a tutor-marked assignment. It is compulsory for you to answer four TMAs and submit them for marking at the study centre. Each TMA is allocated a total of 10 marks. However, the best

three of the four marks shall be used as your continuous assessment score.

You will be able to complete your assignment from the information and materials contained in your reading, references and study units. However, it is desirable in all degree level education to demonstrate that you have read and researched more widely than the required minimum. Using other references will give you a broader viewpoint and may provide a deeper understanding of the subject.

FINAL EXAMINATION AND GRADING

The final examination for **ENT 313: Corporate Planning** will not be more than three hours duration and has a value of 70 per cent of the total course grade. The examination will consist of questions, which reflect the types of self-assessment exercises and TMAs you have previously encountered. All areas of the course will be assessed. Endeavour to review your self-assessment exercise, TMAs and comments on them before the examination. The final examination covers information from all parts of the course.

COURSE MARKING SCHEME

This table shows how the actual course marking scheme is broken down.

Table 1 Course Marking Scheme

ASSESSMENT	MARKS
Assignment 4 (TMAs)	Best three marks of the 4 TMAs @ 10 marks = 30 marks of course = 30%
Final Examination	70% of overall course marks
Total	**100% of course marks**

COURSE OVERVIEW

This table brings together the units and the number of weeks you should spread to complete them and the assignment that follow them are taken into account.

Unit	Title of work	Weeks activity	Assessment (end of unit)
	Module I		
1	Overview of Management as Science, Theory and Practice	1	Assignment 1

2	Planning as an important Management Function	1	Assignment 2
3	Corporate Planning, Strategic Planning and Corporate Strategy Compared	1	
4	Objectives: The Foundation of Planning	1	Assignment 3
5	Classification of Planning	1	
6	Steps in Planning	1	
	Module II		
1	Decision Making I	1	Assignment 4
2	Decision Making II	1	
3	Management by Objectives	1	
4	Premising and Forecasting	1	Assignment 5
	Module III		
1	Operational Planning Tools I – Budget	1	Assignment 6
2	Operational Planning Tools II	1	
3	Operational Planning Tools III	1	
4	Operational Planning Tools IV	1	Assignment 7
	Module IV		
1	Case Studies on Essentials of Planning	1	Assignment 8
2	Case Studies on Decision Making	1	
3	Case Studies on Planning Tools and Techniques	1	Assignment 9
	Revision		
	Total	**17**	

HOW TO GET THE MOST FROM THIS COURSE

In distance learning the study units replace the university lecturer. This is one of the great advantages of distance learning; you can read and work through specially designed study materials at your own pace, and at a time and place that suit you best. Think of it as reading the lecture instead of listening to a lecturer.

In this same way that a lecturer might set you some reading to do, the study units tell you when to read your set of books or other materials. Just as a lecturer might give you an in-class exercise, your study units provide exercises for your to do at appropriate points.

Each of the study units follows a common format. The first item is an introduction to the subject matter of the unit and how a particular unit is integrated with the other units and the course as a whole. Next is a set of learning objectives. These objectives shall let you know what you

should be able to do by the time you have completed the unit. You should use these objectives to guide your study. When you have finished, the units you must go back and check whether you have achieved the objectives. If you make a habit of doing this you will significantly improve your chances of passing the course. The main body of the unit guides you through the required reading from other sources.

Remember that your tutor's job is to assist you. When you need help, do not hesitate to call and ask your tutor to provide it.

- Read this Course Guide thoroughly.
- Organise a study schedule. Refer to the 'Course Overview' for more details. Note the time you are expected to spend on each unit and how the assignments related to the units. Whatever method you chose to use, you should decide on and write in your own dates for working on each unit.
- Once you have created your own study schedule, do everything you can to stick to it. The major reason that students fail is that they get behind with their course work. If you get into difficulties with your schedule, please let your tutor know before it is too late for help.
- Turn to Unit one and read the introduction and the objectives for the unit.
- Assemble the study materials. Information about what you need for a unit is given in the 'Overview' at the beginning of each unit. You will almost always need both the study unit you are working on and one of your set books on your desk at the same time.
- Work through the unit. The content of the unit itself has been arranged to provide a sequence for you to follow. As you work through the unit you will be instructed to read sections from your set books or other articles. Use the unit to guide your reading.
- Review the objectives for each study unit to confirm that you have achieved them. If you feel unsure about any of the objectives, review the study material or consult your tutor.
- When you are confident that you have achieved a unit's objectives, you can then start on the next unit. Proceed unit by unit through the course and try to pace your study so that you keep yourself on schedule.
- When you have submitted an assignment to your tutor for marking, do not wait for its return before starting on the next unit. Keep to your schedule. When the assignment is returned, pay particular attention to your tutor's comments, both on the

tutor-marked assignment form and also on what is written on the assignment. Consult your tutor as soon as possible if you have any questions or problems.

- After completing the last unit, review the course and prepare yourself for the final examination. Check that you have achieved the unit objectives (listed at the beginning of each unit) and the course objectives (listed in this Course Guide).

FACILITATION/TUTORS AND TUTORIALS

There are eight hours of tutorials provided in support of this course. You will be notified of the dates, time and location of these tutorials together with the names and phone number of your tutor, as soon as you are allocated a tutorial group.

Your tutor will mark, comment on your assignments and keep a close watch on your progress and on any difficulties you might encounter as they would provide assistance to you during the course. You must submit your tutor-marked assignments to your tutor before the due date (at least two working days are required). They will be marked by your tutor and returned to you as soon as possible. Do not hesitate to contact your tutor by telephone, e-mail, or discussion board if you need help. The following might be circumstances in which you would find help necessary.

CONTACT YOUR TUTOR IF:

- you do not understand any part of the study units or the assigned readings.
- you have difficulty with the self-assessment exercises.
- you have a question or problem with an assignment with your tutor's comment on an assignment or with the grading of an assignment.

Endeavour to attend the tutorials as scheduled. This is the only chance to have face-to-face contact with your tutor and to ask questions, which are answered instantly. You can raise any problem encountered in the course of your study. To gain the maximum benefit from course tutorials, prepare a question list before attending them. You will learn a lot from participating in discussions actively.

SUMMARY

As earlier stated, the course **ENT 313: Corporate Planning** is designed to introduce you to various techniques, guides, principles, practices and so on relating to corporate planning as a means of ensuring organisation's effectiveness.

We hope you enjoy your study at the National Open University of Nigeria (NOUN). We wish you every success in the future.

MAIN COURSE

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MODULE 1 PLANNING AS A VITAL FUNCTION OF MANAGEMENT

UNIT 1 OVERVIEW OF MANAGEMENT AS SCIENCE, THEORY AND PRACTICE

CONTENTS

1.0 INTRODUCTION

Weihrich and Koontz (2005) observed that one of the most important human activities is management. According to them, ever since people began forming groups to accomplish aims they could not achieve as individuals, management has been essential to ensure the coordination of individual efforts. As society come to rely increasingly on group

effort, and as many organised groups have become large, the task of managers has been rising in importance.

In this unit, we shall discuss the nature of management and its importance in any organisation. We shall also discuss managerial skills and the organisational hierarchy as well as consider management from the perspective of a science or an art. The roles of managers, systems approach to management as well the basic functions of management will be considered.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- define the concept of management
- highlight the importance of management to any organisation
- explain the managerial skills and the organisational hierarchy
- consider management from the perspective of a science or an art
- describe the systems approach to management
- discuss managerial skills and the organisational hierarchy
- enumerate and explain managerial roles
- list and explain the basic functions of management.

3.0 MAIN CONTENT

3.1 Definition and Nature of Management

Ikharehon (2006) defines management as a specific organ of a business enterprise. To him, any business enterprise, no matter its legal structure, must have a management to be alive. The enterprise has no effective existence without managers in place. Weihrich and Koontz (2005) see management as the process of designing and maintaining an environment in which individuals, working together in groups, efficiently accomplish selected aims. The term "management" according to Robbins and Coulter (1998), refers to the process of coordinating and integrating activities so that they are completed efficiently and effectively with and through other people.

Management is the most expensive resource in business organisations and the one that depreciates the fastest and needs the most constant replenishment. It takes years to build a management team; however, it can be destroyed in a short period of misrule. A manager is the dynamic, life-giving element in every business and as such, without his leadership, the resources of production remain untapped and never become useful. The quality and performance of managers determine the

success of a business; indeed they determine its survival. In other words, how well businesses are managed determine whether the business goals will be reached or not. Management also determines how well the enterprise and workers function. In other words, management directly mirrors management's competence and structure.

Any business enterprise must build a true team and individual efforts into a common effort. Each member of the enterprise contributes something different, but they must all contribute towards a common goal. In other words, their efforts must all pull in the same direction, and their contributions must fit together to produce a whole-without gaps, friction, or unnecessary duplication of effort.

Business performance therefore requires that each job be directed towards the objectives of the whole business; and in particular, each manager's job must be focused on the success of the whole. The performance that is expected of the manager must be derived from the performance goal of the business, his results must also be measured by the in terms of performance, and his superior must know what contribution to demand and expect of him and must judge him accordingly.

SELF-ASSESSMENT EXERCISE

From your own perspective, how will you define the concept "management?"

3.2 Management as an important Management Function

Weihrich and Koontz (2005) noted that managers are charged with the responsibility of taking actions that will enable individuals contribute their quota to the organisation objectives. Management, according to them, thus applies to small and large organisations, profit and non-profit enterprises, manufacturing as well as service industries. The term "enterprise" refers to a business, government agency, hospital, university, and any other type of organisation. Effective management is the concern of the corporation head, the hospital administrator, the government first-line supervisor, the Boy Scout leader, the church leader, the baseball manager, and the university vice chancellor.

3.3 Managerial Skills and the Organisational Hierarchy

A manager constantly interacts with people, supervising and communicating with them. His ability to develop an effective leadership style is a significant factor in determining how successful he is in carrying out the managerial functions. His leadership style is important

in building a positive relationship with his employees and in helping to create a favourable work climate within the firm. Katz (1974) identified three kinds of skills for administrators. To these, according to him, may be added a fourth – the ability to design solutions. The relative importance of these skills may different at various levels in the organisational hierarchy. As shown in figure 1.2, technical skills are of greatest importance at the supervisory level, and human skills are helpful in the frequent interactions with subordinates. Conceptual and design skills, on the other hand, are usually not critical for lower-level supervisors. At the middle management level, the need for technical skills decreases, human skills are still essential, while conceptual skills gain in importance.

At the top management level, conceptual and design abilities and human skills are especially valuable, but there is relatively little need for technical abilities. It is assumed, especially in large companies, that chief executive officers (CEOs) can utilise the technical abilities of their subordinates. In smaller firms, however, technical experience may still be quite important.

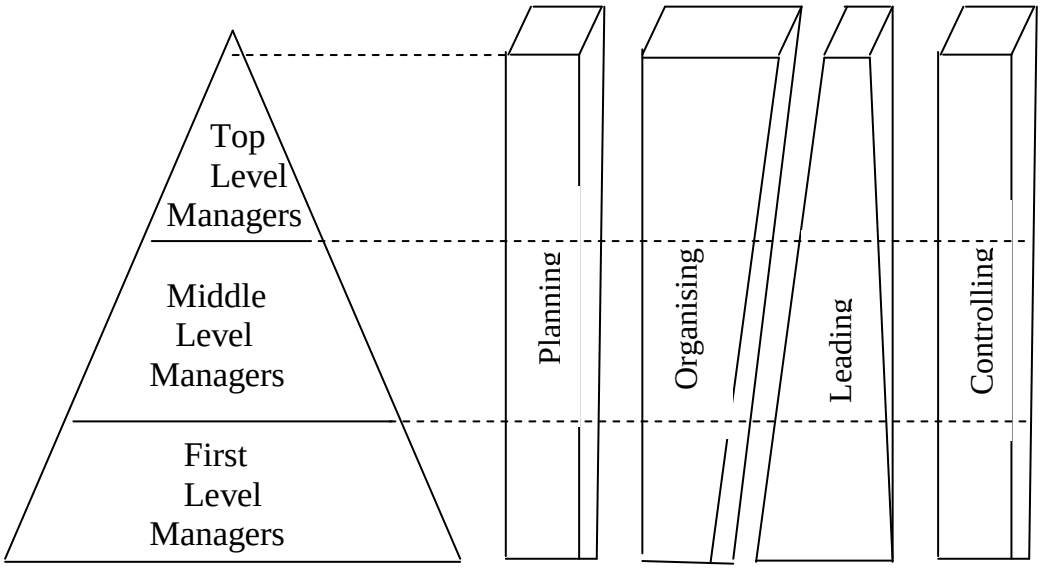

Fig. 1.1: Time spent in Carrying out Managerial Functions

Source: Mahoney, T.A., Jerdee, T.H. & Carroll, S.J. (1965). "The Job(s) of Management." *Industrial Relations* (February), pp. 97 – 110 quoted in Weihrich & Koontz (2005). *Management: A Global Perspective.*

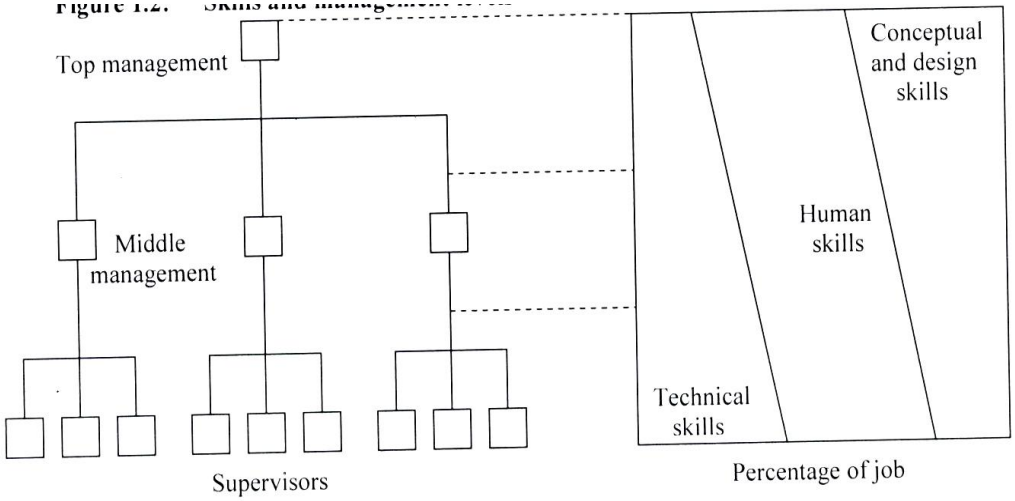

Fig. 1.2: Skills and Management Levels

Source: Weihrich & Koontz (2005). *Management: A Global Perspective*.

3.4 The Goals of All Managers and Organisations

Non-business executives sometimes say that the aim of business managers is simple – to make profit, but profit is really only a measure of a surplus of sales receipts over expenses. For many businesses, an important goal is the long-term increase in the value of their common stock. In all organisations -whether business or non-business, the logical and desirable aim of all managers should be to make profit. To this end, managers must establish an environment in which people can accomplish group goals with the least amount of time, money, materials and personal dissatisfaction or in which they can achieve as much as possible a desired goal with available resources. In a non-business enterprise such as a ministry of extra-governmental organisation, as well as units of a business that are not responsible for total business profits (such as an accounting department), managers still have goals and should strive to accomplish them with the minimum resources or to accomplish as much as possible with available resources.

SELF-ASSESSMENT EXERCISE

List and describe the managerial skills required in an organisational hierarchy.

3.5 Levels of Management

Ikharehon (2006) states that a large-scale organisation requires many managers, each with specific qualifications and specialties. It is

therefore apparent that their responsibilities and specialties differ significantly, depending on their positions in the organisation. The management of an organisation, according to him, may be described as consisting of three levels, namely:

- top management level
- middle management level
- supervisory management level

3.5.1 Top Management Level

Top managers have job titles like chairman of the board, president, vice chancellors, chief executive officer, and management director, among others. Top managers are the chief policymaking officers of an organisation. Their activities include:

(a) spending comparatively more time in reflection and deliberation as well as read staff reports
(b) attending many meetings
(c) making contact with operating officials, deals with overall and long-run goals rather than day-to-day problems
(d) making long-range plans;
(e) making policy, which serves as guides rather than directions
(f) setting goals and devising feedback control
(g) having public relations contacts with government officials, national pressure groups and clients (customer) organisations
(h) visiting branches on consultative rather than punitive inspection
(i) evaluating personnel from the standpoint of choosing future executives.

3.5.2 Middle Management Level

Middle managers are above the supervisors and below the top managers. The job of middle management is to manage managers – to act as a buffer between the top manager and the supervisors. Middle managers spend most of their time analysing data, preparing information for decisions, translating top management decisions into specific projects for supervisors, and monitoring the supervisors' results. Other activities include:

(a) maintaining closer contact with day-to-day results
(b) participating in operating decisions
(c) evaluating production results rather than programme
(d) evaluating personnel from the standpoint of immediate usefulness rather than future potential
(e) making plans for achieving goals established by corporate level

(f) implementing policy decisions within the limitation set by higher echelons.

3.5.3 Supervisory Management Level

Supervisory managers have various titles such as foreman, section chief, and so on. Supervisors are primarily managers of employees and resources. The supervisor's job is the one most people who enter management start with. The activities of this job include:

(a) planning day-to-day production within goals set from above
(b) assigning personnel to specific jobs and tasks
(c) monitoring hour-to-hour results
(d) reporting feedback information daily
(e) taking corrective action on-the-spot
(f) maintaining personal and immediate contact with production personnel
(g) evaluating personnel from the standpoint of immediate needs
(h) implementing policy decisions within the limitations set by higher echelons.

SELF-ASSESSMENT EXERCISE

List the levels of management in an organisation and describe the activities in each of them.

3.6 Management: A Science or an Art

Management, like all arts, makes use of underlying organised knowledge (science) and applies it in the light of realities to gain a desired practical result. According to him, art is the "know-how" to accomplish a desired concrete result. This is what Chester Barnard has called "behavioural knowledge" (Barnard, 1938 cited in Koontz, 1980).

The most productive art is always based on an understanding of the science underlying it. Thus, science and art are not mutually exclusive, but are complementary. As science improves, so should art, just as in the physical and biological sciences. Physicians without knowledge of science become witch doctors; but with science, they may become skillful surgeons. In the same vein, executives who attempt to manage without theory, and knowledge structured by it, must trust on luck or intuition. However, with organised knowledge, they have better opportunity to design a workable and sound solution to a managerial knowledge. It should be noted that mere knowledge or principles or theories, will not assure successful practice, because one must know how to use them.

Although the organisation of human beings for the attainment of common objectives has been on for ages, a science of management is just now developing. Since World War II, there has been an increasing awareness that the quality of managing is important to modern life, and this has resulted in extensive analysis and study of the management process, its environment and techniques.

The importance of management is nowhere better dramatised than in the case of many underdeveloped or developing countries. A review of this problem in recent years by economic development specialists has shown that provision of capital or technology does not ensure development. The limiting factor in almost every case has been the lack of quality and vigour on the part of managers.

Science helps in explaining phenomena. It is based on a belief in the rationality of nature, that is, on the idea that relationships can be found between two or more sets of events. The essential feature of science is that knowledge has been discovered and systematised through the application of scientific method. Scientific method involves determining facts through observation of events or things and verifying the accuracy of these facts through continued observation. Application of scientific method to the development of principles does not totally eliminate doubt. Every generalisation, however proved, may be subject to further research and analysis.

It is often pointed out that the social sciences are "inexact" sciences, as compared with the "exact" physical sciences. It is also sometimes indicated that management is perhaps the most inexact of the social sciences. The social sciences and management in particular, deal with complex phenomena about which too little are known. Likewise, the structure and behaviour of the atom are far less complex than the structure and behaviour of groups of people, including both those inside and those outside an enterprise.

However, we should not forget that even in the most exact sciences, such as physics, there are areas where scientific knowledge does not exist now and must be developed through speculations and hypothesis. As much as it is known of bridge mechanics, bridges still fail as a result of such things as vibrations set up from wind currents. And as we move from the longer known areas of physics into the biological sciences, we find that areas of exactness tend to diminish.

Since virtually all areas of knowledge have tremendous expanses of the unknown, people working in the social sciences should not be defeatist. A scientific approach to management cannot wait until an exact science

of management is developed. Had the physical and biological sciences thus waited, we might still be living in caves. Statistical proof of theory and principles of management is desirable, but there is no use waiting for such proof before giving credence to principles derived from experience. After all, no one has been able to give statistical proof of the validity of the Golden Rule, but people of many religions have accepted this fundamental precept as a guide to behaviour for centuries, and there are few who would doubt that its observance improves human conduct.

SELF-ASSESSMENT EXERCISE

Is management a science or an art? Give tangible explanation to back up your answer.

3.7 Evolution of Management Thought

Indeed many persons mostly practitioners attempted to bring some orderly thought to management, but in a field of such importance, one would have expected a stronger interest and faster growth of management thought many years ago. The quest is: why the slowness in development of management thought? The reasons according to Ikharehon (2006) include the following.

First, the delay has been the preoccupation of economists with political economy and the no managerial aspects of business. In their analysis of business enterprise and the development of philosophical precepts concerning business, the early economists generally followed the lead of Adam Smith whose concern was for measures to increase the wealth of a nation; of David Ricardo, whose emphasis was upon the distribution to the factors of production; and of Alfred Marshal and others, who refined some of the marginal analyses in competitive and monopolistic marketing.

Second, one would have expected that political science would have been the father of theory of management, since the administration of programmes is one of the major tasks of government and since government itself is the oldest comprehensive form of social organisation. Rather, early political theorists were slow to turn their attention to the problem of administration. They, like the early economists, were too preoccupied with policymaking on a national and international level, therefore, they largely overlooked the executive process at least until in recent years.

Third, the delay to some extent has been due to the tendency to compartmentalise the disciplines within the broad field of social

sciences as in the failure to apply the research of sociologists to the area of management.

Finally, there was for many years a widespread belief among managers in business, government and other organisations that management is susceptible to theory rather than management is totally an art. Hence, in the past, business owners and managers preoccupied themselves with technology, price among others.

3.7.1 Early Contributions to Management Thought

Different contributions of writers and practitioners have resulted in different approaches to management, and these make up a "management theory jungle" (Weihrich & Koontz, 2005). Highlighted below are the summaries of the major contributions of management writers and practitioners in a tabular format.

Table 1.1: Early Contributors to Management Thought

Name	**Year of Major work**	**Major Contribution to Management**
Frederick W. Taylor	Shop Management (1903) Principles of scientific management (1911) Testimony before the Special House Committee (1912)	Acknowledged as the father of scientific management. His primary concern was to raise productivity through greater efficiency in production and increased pay for workers, by applying the scientific method. His principles emphasise using science, creating group harmony and cooperation, achieving maximum output, and developing workers.
Henry L. Gantt	1901	Called for scientific selection of workers and "harmonious cooperation" between labour and management. Developed Gantt Chart and stressed the need for training.
Frank and Lillian Gilbreth	1900	Frank is known primarily for his time and motion studies. Lillian, an industrial psychologist, focused on the human aspects of work and the understanding of workers' personalities and needs.
Modern Operational Management Theory		

Henri Fayol	Administration Industrielle et Générale (1916)	Referred to as the father of modern management theory. Divided industrial activities into six groups: technical, commercial, financial, security, accounting, and managerial. Recognised the need for teaching management. Formulated 14 principles of management, such as authority and responsibility, unity of command, scalar chain and spirit de corps.
Behavioural Sciences		
Hugo Munsterberg	1912	Application of psychology to industry and management.
Walter Dill Scott	1910 – 1911	Application of psychology to advertising, marketing, and personnel.
Max Weber	Translations 1946, 1947	Theory of bureaucracy
Vilfredo Pareto	Books (1896 – 1917)	Referred to as the father of the social systems approach to organisation and management
Elton Mayo and F.J. Roethlisberger	1933	Famous studies at the Hawthorne plant of the Western Electric Company on the influence of social attitudes and relationships of work groups on performance.
Systems Theory		
Chester Barnard	The functions of the Executive (1938)	The task of managers is to maintain a system of cooperative effort in a formal organisation. Suggested a comprehensive social systems approach to managing.
Modern Management Thought There are many authors and major contributors such as Chris Argyris, Robert R. Blake, C. West Churchman, Ernest Dale, Keith Davis, Mary Parker Follett, Frederick Herzberg, G.C. Homans, Harold Koontz, Rensis Likert, Douglas McGregor, Abraham H. Maslow, Lyman W. Porter, Herbert Simon, George A. Steiner, Lyndall Urwick, Norbert Wiener, and Joan Woodward.		
Peter F. Druker	1974	Very prolific writer on many general management topics.
W. Edwards Deming	After World War II	Introduced quality control in Japan.
Lawrence	1969	Observed that eventually people

Peter		get promoted to a level where they are incompetent.
William Ouchi	1981	Discussed selected Japanese managerial practices adapted in the U.S. environment.
Thomas Peters and Robert Waterman	1982	Identified characteristics of companies they considered excellent. Source:

Source: Claude S. George, Jr. (1972). *The History of Management Thought.* Englewood Cliffs, NJ: Prentice-Hall.

We will discuss three major authors and contributors to management thoughts, namely: Frederick Taylor, Henri Fayol and Elton Mayo/F.J. Roethlisberger.

Frederick Taylor and Scientific Management

Frederick Winslow Taylor gave up going to college and started out as an apprentice pattern maker and machinist in 1875. He joined the Midvale Steel Company in Philadelphia as a machinist in 1878, and rose to the position of chief engineer after earning a degree in engineering through evening study. He invented high-speed steel-cutting tools and spent most of his life as a consulting engineer. Taylor is generally acknowledged as the father of scientific management. Probably no other person has had a greater impact on the early development of management. His experiences as an apprentice, a common labourer, a foreman, a master mechanic, and then the chief engineer of a steel company gave Taylor ample opportunity to know first-hand the problems and attitudes of workers and to see the great possibilities for improving the quality of management.

Taylor's famous work *Principles of Scientific Management* was published in 1911. The fundamental principles that Taylor saw underlying the scientific approach to management are as follows:.

- replacing rules of thumb with science (organised knowledge)
- obtaining harmony, rather than discord, in group action
- achieving cooperation of human beings, rather than chaotic individualism
- working for maximum output, rather than restricted output
- developing all workers to the fullest extent possible for their own and their company's highest prosperity

You will notice that these basic precepts of Taylor's are not far from the fundamental beliefs of the modern manager.

Henri Fayol, the Father of Modern Management Theory

Perhaps the real father of modern management theory is the French industrialist Henri Fayol. He recognised a widespread need for principles and management teaching. Consequently, he identified 14 such principles, noting that they are flexible, not absolute, and must be usable regardless of changing conditions. Let us look at some of these principles.

- Division of work
- Authority and responsibility
- Discipline
- Unity of command
- Unity of direction
- Subordination of individual to general interest
- Remuneration
- Centralisation
- Scalar chain
- Order
- Equity
- Stability of tenure
- Initiative
- Espirit de corps

(1) **Division of work:** This is the specialisation which economists consider necessary to efficiency in the use of labour.

(2) **Authority and responsibility:** Fayol suggests that authority and responsibility are related, with the latter arising from the former. He sees authority as a combination of official factors, deriving from the manager's position, and personal factors, "compounded of intelligence, experience, moral worth, past service, and so on."

(3) **Discipline:** Fayol emphasised that there should be discipline in organisation to enhance stability, efficiency and high level of productivity.

(4) **Unity of command:** This means that employees should receive orders from their superior only.

(5) **Unity of direction:** According to this principle, each group of activities with the same objective must have on head and one plan.

(6) **Subordination of individual to general interest:** When the two are found to differ, management must reconcile them.

(7) **Remuneration:** Remuneration and methods of payment should be fair and afford the maximum possible satisfaction to employees and employer.
(8) **Centralisation:** This refers to the extent to which authority is concentrated or dispersed. Individual circumstances will determine the degree that will give the best overall yield.
(9) **Scalar chain:** Fayol thinks of this as a "chain of superiors" from the highest to the lowest ranks, which, while not to be departed from needlessly, should be short-circuited when following scrupulously would be detrimental.
(10) **Order:** This is essentially a principle of organisation in the arrangement of things and people.
(11) **Equity:** Loyalty and devotion should be elicited from personnel by a combination of kindness and justice on the part of managers when dealing with subordinates.
(12) **Stability of tenure:** Workers should be made to work in a particular assignment for a fairly long time to enable them master the skill of such management, thus adding efficiency to the actual production process.

(13) **Initiative:** Workers in an organisation should not be treated like robots or machines. In other words, they should be allowed to use their discretion in carrying out their activity where necessary.
(14) **Espirit de Corps:** This is principle states that "in union there is strength", as well as an extension of the principle of unity of command. It emphasis the need for teamwork and the importance of communication in achieving objective.

Fayol regarded the elements of management as the functions of planning, organising, commanding, coordinating and controlling.

3.7.2 Elton Mayo and F.J. Roethlisberger and the Hawthorn Studies

Elton Mayo, F.J. Roethlisberger, and others undertook the famous experiments at the Hawthorne plant of the Western Electric Company between 1927 and 1932. Earlier, from 1924 to 1927, the National Research Council made a study in collaboration with Western Electric to determine the effect of illumination and other conditions on workers and their productivity. Finding that productivity improved when illumination was either increased or decreased for a test group, the researchers were about to declare the whole experiment a failure. However, Mayo of Harvard saw in it something unusual and, with Roethlisberger and others continued the research.

What Mayo and his colleagues found, partly based on the earlier thinking of Vilfredo Pareto, was to have a dramatic effect on management thought. Changing illumination for the test group, modifying rest periods, shortening workdays, and varying incentive pay systems did not seem to explain changes in productivity. Mayo and his researchers then came to the conclusion that other factors were responsible.

They found, in general, that the improvement in productivity was due to such social factors as morale, satisfactory interrelationships between members of a work group (a sense of belonging), and effective management – a kind of managing that takes into account human behaviour, especially group behaviour, and serves it through such interpersonal skills as motivating, counselling, leading, and communicating. This phenomenon, arising basically from people being "noticed", has been named the Hawthorne effect.

SELF-ASSESSMENT EXERCISE

There are many authors and major contributors such as Chris Argyris, Robert R. Blake, C. West Churchman, Ernest Dale, Keith Davis, Mary Parker Follett, Frederick Herzberg, G.C. Homans, Harold Koontz, Rensis Likert, Douglas McGregor, Abraham H. Maslow, Lyman W. Porter, Herbert Simon, George A. Steiner, Lyndall Urwick, Norbert Wiener, and Joan Woodward.

Required:

You are expected to research into the life, times and contributions of these authors to management thought and development.

3.8 The Managerial Roles

One widely discussed approach to management theory is the managerial roles approach, which was popularised by Henry Mintzberg of McGill University. Essentially, his approach is to observe what managers actually do, and from such observations come to conclusions as to what managerial activities (or roles) are. Although many researchers have studied the actual work of managers – from CEOs to line supervisors – Mintzberg has given this approach higher visibility.

After systematically studying the activities of five CEOs in a variety of organisations, Mintzberg came to the conclusion that executives do not perform the classical managerial functions of planning, organising, commanding, coordinating, and controlling. Instead, they engage in a variety of other activities. From his research and the research of others

who had studied what managers actually did, Mintzberg concluded that managers really fill a series of ten roles which are grouped into three major roles. They are:

- interpersonal roles
- informational roles
- decision roles

Interpersonal Roles

1. The "figurehead" role (performing ceremonial and social duties as the organisation's representative).
2. The leader role.
3. The liaison role (particularly with outsiders).

Informational Roles

1. The recipient role (receiving information about the operation of an enterprise).
2. The disseminator role (passing information to subordinates).
3. The spokesperson role (transmitting information to those outside the organisation).

Decision Roles

1. The entrepreneurial role.
2. The disturbance-hander role.
3. The resource-allocator role.
4. The negotiator role (dealing with various persons and groups of persons).

Mintzberg approach has also been criticised. In the first place, the sample of five CEOs used in his research is far too small to support so sweeping a conclusion. In the second place, in analysing the actual activities of managers – from CEOs to supervisors – any researcher must realise that all managers do some work that is not purely managerial; one would expect even presidents of large companies to spend some of their time in public and stockholder relations, in fund-raising, and perhaps in dealer relations, marketing, and so on. In the their place, many of the activities Mintzberg found are in fact evidence of planning, organising, staffing, leading, and controlling. For example, what is resource allocation but planning? The entrepreneurial role is certainly an element of planning. And the interpersonal roles are mainly instances of leading. In addition the informational roles can be fitted into a number of the functional areas.

Nevertheless, roles, which managers really perform, can have considerable value. In analysing activities, an effective manager might wish to ascertain how activities and techniques fall into the various fields of knowledge reflected by the basic functions of managers. However, the roles Mintzberg identified appear to be incomplete. Where does one find such unquestionably important managerial activities as structuring an organisation, selecting and appraising managers, and determining major strategies? Omissions such as these make one wonder whether the executives in his sample were really effective managers. They certainly raise a serious question as to whether the managerial roles approach, at least as put forth here, is an adequate one on which to base practical operational theory of management.

SELF-ASSESSMENT EXERCISE

i. What roles do managers play in an organisation?
ii. List and discuss some of them.

3.9 Systems Approach to Management

An unorganised enterprise does not, of course, exist in a vacuum. Rather, it is dependent on its external environment; it is a part of larger systems, such as the industry to which it belongs, the economic system and society. Thus, the enterprise receives inputs, transforms them, and exports the outputs to the environment, as shown by the basic model in figure 1.3. However, this simple model needs to be expanded and developed into a model of process, or operational, management that indicates how the various inputs are transformed through the managerial functions of planning, organising, staffing, leading, and controlling, as shown in figure 1.4.

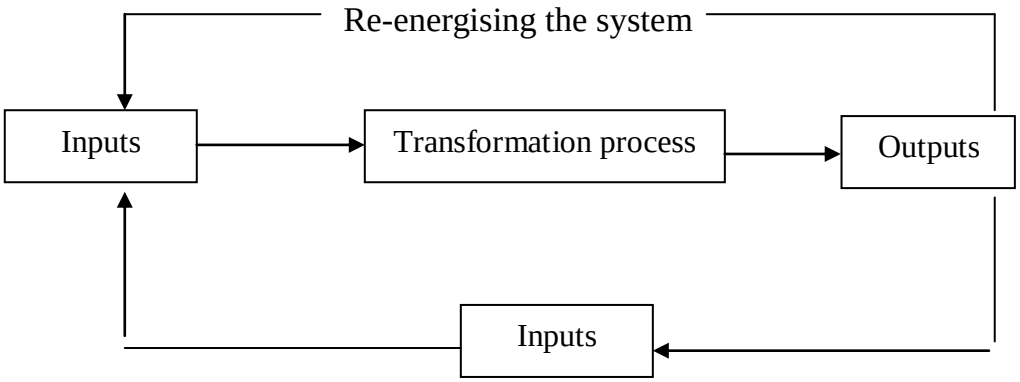

Fig. 1.3: Input-Output Model

Source: Sengel, P. (1996). "Interview in Quality Digest." Retrieved October 5, 2002 from www.infed.org /thinkers/senge.htm

When Peter Sengel, the author of *The Fifth Discipline: The Art and Practice of the Learning Organisation*, was asked the most important issue that faces domestic and international businesses today, he said, "I would say it is the system of management" (Sengel, 2002). The book is about systems approach to the management process. The components of this model are discussed as follows:

1. Inputs and Claimants

The inputs from the external environment (see figure 1.4) may include people, capital, managerial skills, as well as technical knowledge and skills. In addition, various groups of people make demands on the enterprise. For example, employees want higher pay, more benefits, and job security. Consumers demand safe and reliable products at reasonable prices. Suppliers want assurance that their products will be bought. Stockholders want not only a high return on their investment, but also security for their investment. Federal, state, and local governments depend on taxes paid by the enterprise, but they also expect the enterprise to comply with their laws. Similarly, the community demands that enterprises be "good citizens", providing the maximum number of jobs with a minimum of pollution. Other claimants to the enterprise may include financial institutions and labour unions; even competitors have a legitimate claim for fairplay. It is clear that many of these claims are incongruent, and it is the manager's job to integrate the legitimate objectives of the claimants. This may be through compromises, trade-offs, and denial of the manager's own ego.

2. The Managerial Transformation Process

It is the task of managers to transform the inputs, in an effective and efficient manner, into outputs. Of course, the transformation process can be viewed from different perspectives. Thus, one can focus on such diverse enterprise functions as finance, production, personnel, and marketing. Writers on management look at the transformation process in terms of their particular approaches to management. Specifically, writers belonging to the human behaviour school focus on interpersonal relationships, social systems theorists analyse the transformation by concentrating on social interactions, and those advocating decision theory see the transformation as sets of decisions. However, the most comprehensive and useful approach for discussing the job of managers is to use the managerial functions of planning, organising, staff, leading, and controlling as a framework for organising managerial knowledge.

3. The Communication System

Communication is essential to all phases of the managerial process for two reasons. First, it integrates the managerial functions. For example, the objectives set in planning are communicated so that the appropriate organisation structure can be devised. Communication is essential in the selection, appraisal, and training of managers to fill the roles in this structure. Similarly, effective leadership and the creation of an environment conductive to motivation depend on communication. Moreover, it is through communication that one determines whether performance conform to plans. Thus, it is communication that makes managing possible.

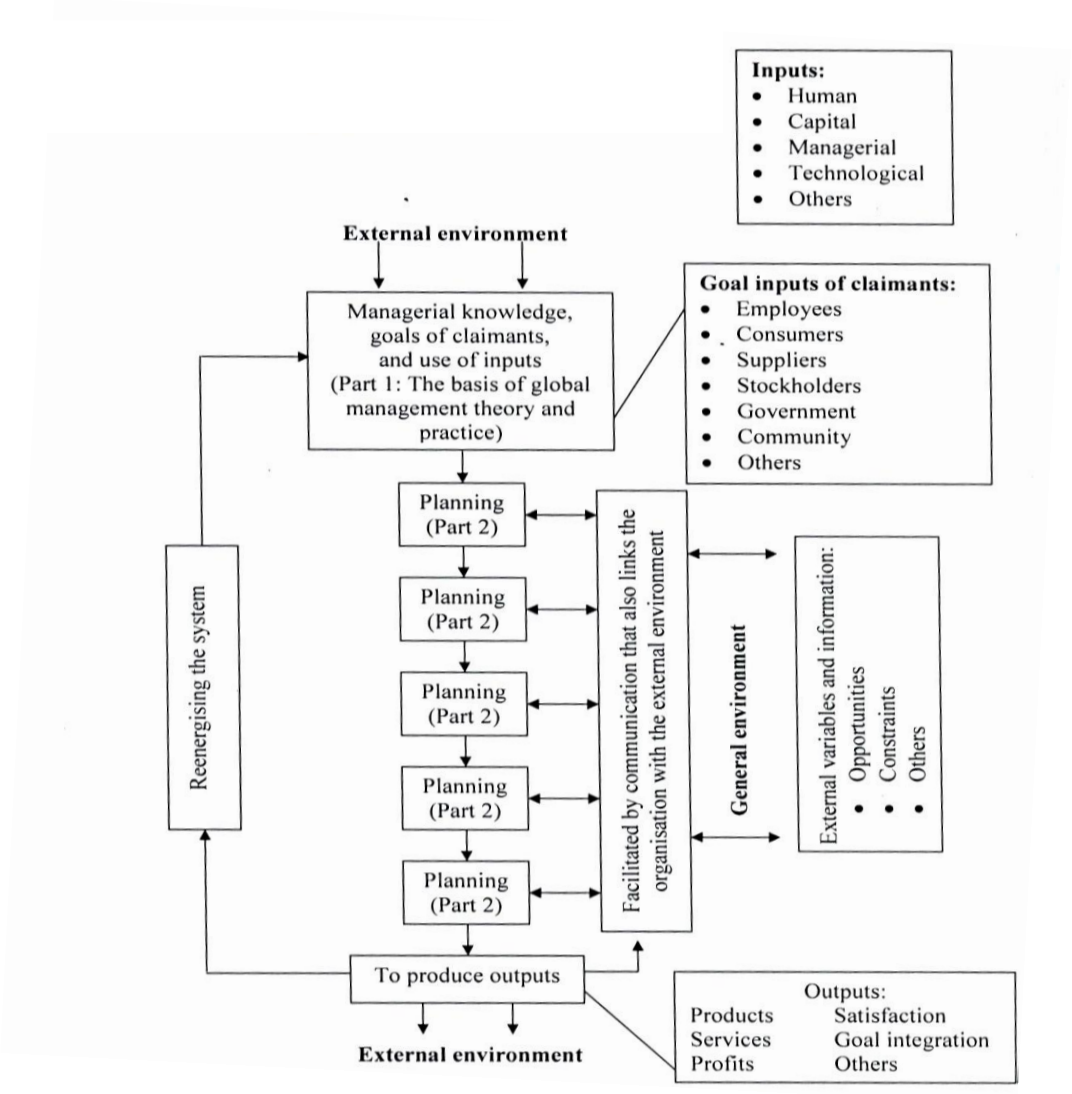

Fig. 1.4: Systems Approach to Management

Source: Sengel, P. (1996). Interview in Quality Digest, November

www.infed.org /thinkers/senge.htm (accessed October 5, 2002).

The second purpose of the communication system is to link the enterprise with its external environment, where many of the claimants are. For example, one should never forget that customers, who are the reason for the existence of virtually all businesses, are outside a company. It is through the communication system that the needs of customers are identified; this knowledge enables the firm provide products and services at a profit. Similarly, it is through an effective communication system that the organisation becomes aware of competition and other potential threat and constraining factors.

4. External Variables

Effective managers will regularly scan the external environment. While it is true that managers may have little or no power to change the external environment, they have no alternative but to respond to it.

5. Outputs

It is the task of managers to secure, use and transform inputs of the enterprise through the managerial functions – with due consideration for external variables – into outputs. Although the kinds of outputs will vary with the enterprise, they usually include many of the following: products, services, profits, satisfaction, and integration of the goals of various claimants to the enterprise. Most of these outputs require no elaboration, and only the last two will be discussed.

The organisation must indeed provide many "satisfactions" if it hopes to retain and elicit contributions from its members. It must contribute to the satisfaction, not only of basic material needs (such as employees' needs for money, food and shelter or to have job security), but also of the needs for affiliation, acceptance, esteem, and perhaps even self-actualisation so that one can realise one's potential at the workplace.

Another output is goal integration. As noted earlier, the different claimants to the enterprise have very divergent – and often directly opposing – objectives. It is the task of managers to resolve conflicts and integrate these aims.

6. Re-energising the System

Finally, it is important to note that, in the systems model of management process, some of the outputs become inputs again. Thus, the satisfaction and new knowledge or skills of employees become important human inputs. Similarly, profits, the surplus of income over costs, are reinvested in cash and capital goods, such as machinery, equipment, buildings, and inventory.

3.10 Functions of Management

The functions of managers and management provide a useful structure for organising management knowledge. There have been no new ideas, research findings, or techniques that cannot readily be placed in the classifications of planning, organising, staffing, leading and controlling.

Planning

Planning involves selecting missions and objectives as well as the actions to achieve them; it requires decision making that is, choosing future courses of action from among alternatives. As you will discover in subsequent units, there are various types of plans, ranging from overall purposes and objectives to the most detailed actions to be taken, such as ordering a special stainless steel bolt for an instrument or hiring and training workers for an assembly line. It may also involve recruiting new academic and non-teaching staff for the National Open University of Nigeria (NOUN) and sponsoring their training in postgraduate diploma in open and distance education to make them become practitioners or experts in open and distance learning (ODL) system, thereby making them more effective and efficient in their respective duties.

No real plan exists until a decision – a commitment of human or material resources – has been made. Before a decision is made, all that exists is a planning study, an analysis, or a proposal; there is no real plan. The various aspects of planning are discussed in subsequent units of this course.

Organising

People working together in groups to achieve some goal must have roles to play, much like the parts actors play in a drama, whether these roles are the ones they develop themselves, are accidental or haphazard, or are defined and structured by someone who wants to make sure that they contribute in a specific way to group effort. The concept of a role implies that what people do has a definite purpose or objective; they know how their job objective fits into the group effort, and they have the necessary authority, tools, and information to accomplish the task. This can be seen in as simple as a group effort such as setting up camp on a fishing expedition. Everyone could do anything he or she wants to do, but activity would almost certainly be more effective and certain tasks would be less likely to be left undone if one or two persons were given the job of gathering firewood, some the assignment of getting water, others the tasks of starting a fire, yet others the job of cooking, and so on.

Organising then, is that part of managing, which involves establishing an intentional structure of roles for people to fill in an organisation. It is intentional in the sense of making sure that all the tasks necessary to accomplish goals are assigned and, it is hoped, assigned to people who can do them best.

The purpose of an organisation structure is to help create an environment for human performance. It is then a management tool and not an end in itself. Although the structure must define the tasks to be done, the roles so established must also be designed in the light of the abilities and motivations of the people available.

Designing an effective organisation structure is not an easy managerial task. Many problems are encountered in making structures fit situations, including both defining the kinds of jobs that must be done and finding the people to do them.

Staffing

Staffing involves filling and keeping occupied, the position in the organisation structure. This is done by identifying workforce requirements; inventorying the people available; and recruiting, selecting, placing, promoting, appraising, planning the careers of, compensating, and training or otherwise developing both candidates and current jobholders so that tasks are accomplished effectively and efficiently.

Leading

Leading involves influencing people so that they will contribute to organisational and group goals. It has to do predominantly with the interpersonal aspect of managing. All managers would agree that their most important problems arise from people – their desires and attitudes as well as their behaviour as individuals and in groups – and those effective managers also need to be effective leaders. Since leadership implies followership and people tend to follow those who offer a means of satisfying their own needs, wishes, and desires, it is understandable that leading involves motivation, leadership styles and approaches, and communication.

Controlling

Controlling is measuring and correcting individual and organisational performance to ensure that events conform to plans. It involves measuring performance against goals and plans, showing where deviations from standards exist, and helping to correct deviations from

standards. In short, controlling facilitates the accomplishment of plans. Although planning must precede controlling, plans are not self-achieving. Plans guide managers in the use of resources to accomplish specific goals; then activities are checked to determine whether they conform to the plans.

Control activities generally relate to the measurement of achievement. Some means of controlling, like the budget for expenses, inspection records, and the record of labour-hours lost, are generally familiar. Each of them measures, and each shows whether plans are working out. If deviations persist, correction is indicated. Nothing can be done about reducing scrap, for example, or buying according to specifications, or handling sales returns unless one knows who is responsible for these functions.

Controlling events to conform to plans means locating the persons who are responsible for results that differ from planned action and then taking the necessary step to improve performance. Thus, outcomes are controlled by controlling what people do.

Coordination: The Essence of Managership

Some authorities consider coordination to be a separate function of the manager; it seems accurate. However, it is more accurate to regard it as the essence of managership, for achieving harmony among individual efforts toward the accomplishment of group goals. Each of the managerial functions is an exercise contributing to coordination.

Even in the case of a church or a fraternal organisation, individuals often interpret similar interests in different ways, and their efforts toward mutual goals do not automatically mesh with the efforts of others. It thus becomes the central task of the manager to reconcile differences in approach, timing, effort, or interest and to harmonise individual goals to contribute to organisational goals.

4.0 CONCLUSION

From different definitions given by different experts, it can be concluded that management is the process of designing and maintaining an environment for efficiently accomplishing selected aims and objectives. Management function is essential in any organisation because managers are charged with the responsibility of taking actions that will enable individuals to make their best contributions to group objectives.

Development of an effective leadership style is a significant factor in determining how successful a manager is in carrying out the managerial

functions. This leadership style is also important in building a positive relationship with his employees and in helping to create a favourable work climate within the firm. Three skills were identified namely: technical skills, human skills and conceptual/design skills.

For many businesses, an important goal is the long-term increase in the value of their common stock. In all organisations, whether business or non-business, the logical and publicly desirable aim of all managers should be a surplus. Managers must therefore establish an environment in which people can accomplish group goals with the least amount of time, money and materials to enable them achieve as much as possible a desired goal with available resources.

There are three levels of management, which include top, middle and supervisory management levels. The top managers spend comparatively more time in reflection and deliberation as well as read staff reports, attend many meetings, make contact with operating officials dealing with overall and long-run goals rather than day-to-day problems, make long range plans, and make policy which serves as guides rather than directions. The middle management level is above the supervisors and below the top managers. Their job is to manage managers and act as buffer between the top manager and the supervisors. Finally, the supervisory management level are primarily concerned with managing employees and resources i.e. plan day-to-day production within goals set from above, assign personnel to specific jobs and tasks, watch hour to hour results, report feedback information daily, take corrective action on the spot, and so on.

Different contributions of writers and practitioners have resulted in different approaches to management and these make up the management theory. These writers include Frederick W. Taylor, Henry L. Gantt, Frank and Lillian Gilbreth, Henri Fayol, Hugo Munsterberg, Walter Dill Scott, Max Weber, Vilfredo Pareto, Elton Mayo and F.J. Roethlisberger, Chester Barnard, Peter F. Drucker, W. Edwards Deming, Lawrence Peter, William Ouchi and Thomas Peters & Robert Waterman.

Managers carry out the functions of planning, organising, staffing, leading, and controlling. Managing is an essential activity at all organisational level; however, the managerial skills required vary with the organisational level. The goal of all managers is to create a surplus.

The systems approach to management indicates how the various inputs are transformed through the managerial functions of planning, organising, staffing, leading and controlling to produce outputs.

5.0 SUMMARY

In this unit, we have:

- defined the concept management
- highlighted the importance of management to any organisation
- explained the managerial skills and the organisational hierarchy
- seen management from the perspective of a science or an art
- described the systems approach to management
- discussed managerial skills and the organisational hierarchy
- enumerated and explained managerial roles
- listed and explained the basic functions of management.

In the next unit, you will be introduced to planning, as an important management function.

6.0 TUTOR-MARKED ASSIGNMENT

i. Why has Frederick Taylor been called the father of scientific management and Henri Fayol the father of modern management theory?
ii. What are the managerial functions? Discuss them.
iii. In what fundamental way are the basic goals of all managers at all levels and in all kinds of enterprises the same?

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UNIT 2 PLANNING AS AN IMPORTANT FUNCTION OF MANAGEMENT

CONTENTS

1.0 INTRODUCTION

In the last unit, we defined and discussed the nature of management. We discussed managerial skills and the organisational hierarchy, considered management from the perspective of a science or an art, enumerated the roles of managers. Furthermore, we described the systems approach to management as well as listed and explained the basic functions of management.

In this unit, we shall dwell extensively on planning as an important function of management. This discussion will lead to defining the concept, differentiate between planning and forecasting, classify plans, examine the nature of plans, list and explain the purposes of planning, discuss planning and performance and enumerate the misconceptions about planning.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- define the concept of planning
- differentiate between planning and forecasting
- list the features plans
- list and explain the purposes of planning

- discuss planning and performance
- enumerate the various misconceptions about planning.

3.0 MAIN CONTENT

3.1 Definition of Planning

Planning is a must for every business enterprise operating in a dynamic environment where today's world is a global village. The most important aspect of this changing environment is change in technology, government policy and activities, social norms, among others. Planning provides direction and sense of purpose. It is a unifying framework within which such organisation are guided, reveal future opportunities and threats, means of minimising risks, provides performance standard, and so on.

Therefore, in classifying the functions of the manager, there is need to distinguish clearly those of enterprise function operation, such as selling, manufacturing, accounting, engineering and purchasing. Occasionally, scholars concern themselves about the order in which the managerial functions should be undertaken. Theoretically, planning comes first, and organising, staff, leading and controlling follow (Koontz, et al. 1980). What then is planning?

Weihrich and Koontz (2005) state that planning involves selecting missions and objectives and deciding on the actions to achieve them; it also requires decision making, that is, choosing a course of action from among alternatives. According to them, plans thus provide a rational approach to achieving pre-selected objectives.

Awujo (1992 quoted in Ikharehon, 2006) defined planning as the activity by which managers analyse present conditions to determine ways of reaching a desired future state. Planning, according to him, encompasses defining organisation goals, establishing an overall strategy for achieving those goals, and developing a comprehensive hierarchy of plans to integrate and coordinate activities. It is concerned, then with the ends (what is to be done) as well as means (how it is to be done).

Planning can be defined as the establishment of objectives, formulation, evaluation and selection of the policies, strategies, tactics and action required to achieve these objectives (Inua, 2011). Planning comprises long-term/strategic planning and short-term operational plans. Short-term operational plan usually refers to a period of one year. Thus, you can see that the overall process of planning covers both the long and short terms.

Robbins and Coulter (1998) define planning as involving defining the organisation objectives or goals, establishing an overall strategy for achieving those goals, and developing a comprehensive hierarchy of plans to integrate and coordinate activities. It can further be defined in terms whether it's informal or formal.

In informal planning, nothing is written down, and there is little or no sharing of objectives with others in the organisation. This type of planning is done in small businesses; the owner/manager has a vision of where he or she wants to go and how to get there. The planning is general and lacks continuity. It exists in some large organisations too, and some small businesses have very sophisticated formal plans.

As regards a formal planning, the objectives covering a period of years are defined. These objectives are written and made available to organisational members. Finally, specific action programmes exist for the achievement of the objectives; that is, managers clearly define the path they want to take or follow to get the organisation from where it is to where they want it to be.

SELF-ASSESSMENT EXERCISE

Planning covers the whole process of determining what purpose to pursue and the means of attaining them as well as the mechanism for monitoring results. Discuss.

3.2 Features of Planning

Planning is characterised by the following features.

- It must be realistic and capable of implementation;
- It must be comprehensive;
- It must have clearly defined objectives in terms of scope, accuracy, clarity and definitiveness;
- It must be flexible;
- It must be futuristic;
- It must relate to conditions of relative certainty and uncertainty; and
- It must be a continuous process.

3.3 Purposes of Planning

Why should managers plan? Weihrich and Koontz (2005) state at least four reasons. According to them, it gives direction, reduces the impact of change, minimises waste and redundancy, and sets the standards used in controlling.

Planning establishes coordinated effort. It gives direction to managers and non-managers alike. When employees know where the organisation is going and what they must contribute to reach the objective, they can coordinate their activities, cooperate with each other, and work in teams. Without planning, departments might work at cross purposes, preventing the organisation from moving efficiently toward its objectives.

Planning reduces uncertainty by forcing managers to look ahead, anticipate change, consider the impact of change, and develop appropriate responses. It also clarifies the consequences of actions managers might take in response to change.

In addition, planning reduces overlapping and wasteful activities; it pinpoints waste and redundancy. Furthermore, it makes ends clear; inefficiencies become obvious and can be corrected and eliminated.

Finally, planning establishes objectives or standards that are used in controlling. If we are unsure of what we are trying to achieve, how can we determine whether we have actually achieved it? In planning, we develop the objectives, identify any significant deviations, and take the necessary corrective action. Without planning, there would be no way to control.

3.4 Planning and Forecasting

Planning cannot be divorced from forecasting, for what is feasible depends, to a large extent, on events in the external world. The actual planning starts with goal setting, but any member of contingencies in the environment will have a major effect on the extent to which various goals may be feasible.

Hornby (2006) defines forecasting as a statement of what will occur in the future based on information that is available now. Ikharehon (2006) divides forecasts into two, namely: economic forecasts; technology forecasts and forecasts of changes in public taste and public opinion.

Economic forecasts: These are basic for every company sales depending on how much money is available for purchase. With few exceptions, sales are bound to drop during a period recession.

Technological forecasts: This involves such question as what new inventions or new technical developments are probable, and when they are likely to come on the market. The answer to this question is important for new developments can make a company's products obsolete, or at least reduce the market for them drastically.

Forecasts of changes in Public Taste and Public Opinion: Changes in public taste affect not only products or services designed for the ultimate consumer, but sales to industry as well. For instance, if sales of a product drop, the companies that produce it will contain their operations and buy less from their suppliers. Changes in public opinion may produce new laws that necessitate changes in plans or perhaps give rise to boycotts of some products.

In forecasting, a company should be able to decide the following questions.

1. What product(s) or services will be provided?
2. To whom will we sell? That is, what is our market share?
3. What methods or means will be used to sell these product(s)? Is it through direct sales, or advertising, or both?
4. What plant, equipment, and personnel will be needed?

3.5 Planning Process

Planning process has to do with a logical set of steps a manager must take to find ways of reaching desired future objectives. Meanwhile, in planning process, the first step to consider is the identification of goals of the organisation upon which the plans will be built. In other words, management must have an overall goal in mind before the organisation even comes into existence. This and subsequent specific goals help determine the organisational structure.

The second step of planning process involves a search for opportunities. This is where the manager opens his mind to new ideas, rather than fixing his mind. The third stage involves the translation of opportunities into selected courses of action. The managerial job at this time is to evaluate the alternatives and compare each alternative to factors like the organisation's strengths and weaknesses, and to forecast economic activity.

Furthermore, the next step involves setting specific targets. Here, the plan becomes a budget or some other specific statement of targets. Finally, the planning process must be continuously reviewed and revised where necessary. This will be fully discussed in subsequent unit.

3.7 Relationship between Planning and Controlling

In designing an environment for the effective performance of individuals working together in a group, a manager's most essential task is to see that everyone understands the group's mission and objectives and the methods for attaining them. If group effort is to be effective, people

must know what they are expected to accomplish. This is the function of planning. It is the most basic of all the managerial functions.

Planning, to them, strongly implies managerial innovation and that it bridges the gap from where we are to where we want to be. Figure 2.1 below shows the relationship between planning and controlling functions of management.

Planning and controlling are closely interrelated and complement one another to achieve a common goal/objective.

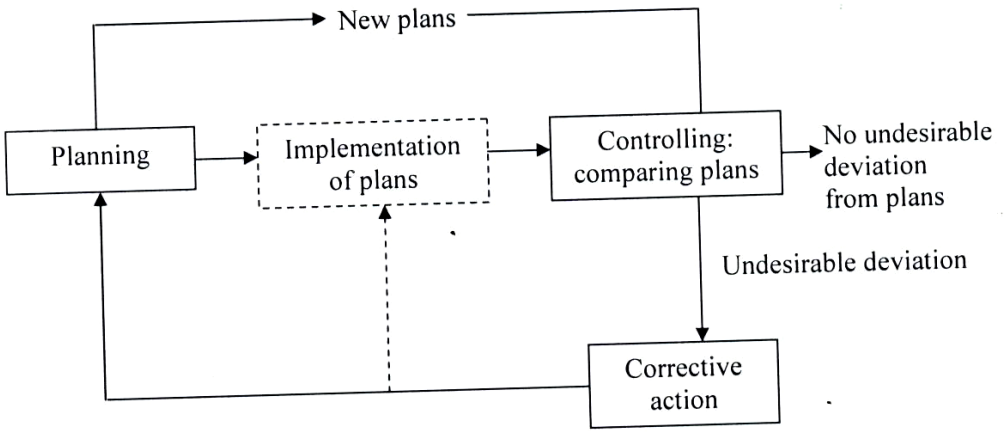

Fig. 2.1: Close relationships of Planning and Controlling

Source: Sengel, P. (1996). "Interview in Quality Digest." Retrieved October 5, 2002 from www.infed.org /thinkers/senge.htm .

3.8 Planning and Performance

The question we would ask is this: Do managers and organisations that plan outperform those that do not? Intuitively, you would expect the answer to be a resounding yes. Reviews of performance in organisations that plan are generally positive, but we should not take that as a blanket endorsement of formal planning. We cannot say that organisational that formally plan always outperforms those that do not.

Studies have been done to test the relationship between planning and performance (Pearce, Robbins & Robinson, Jr., 1987). Based on these studies, we can draw the following conclusions. First generally speaking, formal planning is associated with higher profits, higher return on assets and other positive financial results. Second, the quality of the planning process and the appropriate implementation of the plans probably contribute to high performance than does the extent of planning. Finally, in those studies in which formal planning did not lead

to higher performance, the environment was the culprit. Governmental regulations, powerful labour unions, and similar environmental forces constrain managers' option and thereby reduce the impact of planning on an organisation's performance.

This is because managers will have fewer choices for planning viable alternatives. For example, planning might indicate that a manufacturing firm should produce some of its key parts in Taiwan in order to compete effectively against low-cost foreign competitors. But if the firm's labour union contract specifically forbids transferring work overseas, the firm's plan will be of no value. Dramatic shocks from the environment, such as a fire at a major customer's warehouse or a steep drop in stock prices because of inflationary fears, can also undermine organisation best-laid plans. Given such environmental uncertainty, there is no reason to expect that firms that plan will outperform those that do not.

3.9 Misconceptions about Planning

There are many misconceptions about planning. We will identify some of them and explain the misunderstandings behind them.

1. **Planning that proves inaccurate is a waste of manager's time:** The end result of planning is only one of its purposes. The process itself can be valuable even if the results miss the target. Planning requires managers to think through what they want to do and how they are going to do it. This clarification can be important in and of itself. Managers who do a good job of planning will have direction and purpose, and planning is likely to minimise wasted effort. All of these benefits can occur even if the objectives being sought are missed.
2. **Planning can eliminate change**: Planning cannot eliminate change. Changes will happen no matter what managers do. Managers engage in planning in order anticipate changes to develop the most effective response to them.
3. **Planning reduces flexibility**: Planning implies commitment, but this is a constraint only if managers top planning after doing it once. Planning is an ongoing activity. The fact that formal plans have been thoroughly discussed and clearly articulated can make them easier to revise than an ambiguous set of assumptions carried around in some executive's head. Also, some plans can be made more flexible than others.

3.10 Criticisms of Planning

Ikharehon (2006) states that planning is characterised by major arguments recently offered against it. Some of these are discussed below.

1. **Planning creates too much rigidity:** Formalised planning systems lock people and organisational units into specific periods, with the assumption that conditions will remain relatively stable during the period, which is almost never the case.
2. **Systems can replace intuition and creativity**: Planning systems tried to do for management what the scientific management tried to do for production work – programme and routinise it. However, formal procedures will never be able to forecast discontinuity.
3. **You can plan for change in a turbulent environment:** Most organisations face dynamic, changing, and unpredictable environments. But if you are locked into formal plans, every unpredictable change is seen only as a problem.
4. **Planning reinforces successful organisations to become overly preoccupied with the facts responsible for their success, setting up the conditions that can lead to failure**: Managers in successful organisations tend to develop perpetual biases that encourage them to maintain the status quo. They tend to become overconfident and more entrenched in the strategy they have created. Ironically, success breeds failure.

4.0 CONCLUSION

Planning involves selecting the missions and objectives as well as the actions to achieve them. It involves choosing future course of action from among alternatives. Planning and controlling are closely interrelated, although they are discussed separated in this course. Planning is classified into many components such as missions or purposes, objectives or goals, strategies, policies, procedures, rules, programmes, and budgets.

Once an opportunity is recognised, a manager plans rationally by establishing environment, finding and evaluating alternative courses of action, and choosing a course to follow. Next, the manager must make supporting plans and devise a budget. These activities must be carried out with attention to the total environment.

5.0 SUMMARY

In this unit, we have:

- differentiated between planning and forecasting
- classified plans into different components
- listed the features plans
- listed and explained the purposes of planning
- discussed planning and performance
- enumerated the various misconceptions about planning.

6.0 TUTOR-MARKED ASSIGNMENT

i. What is the relationship between planning and organisational performance?
ii. Identify and rebut some common misconceptions about planning.

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UNIT 3 CORPORATE PLANNING, STRATEGIC PLANNING AND CORPORATE STRATEGY COMPARED

CONTENTS

1.0 INTRODUCTION

In the last unit, we defined the concept of planning, we differentiated between planning and forecasting, classified plans into different components, listed the features plans, listed and explained the purposes of planning, discussed planning and performance and enumerated the various misconceptions about planning.

In this unit, we shall examine in detail the corporate planning, corporate strategy and strategic planning.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- define corporate planning, strategic planning and corporate strategy
- discuss the three concepts comprehensively.

3.0 MAIN CONTENT

3.1 Definition of Concepts: Corporate Planning, Strategic Planning and Corporate Strategy

Aghedo (2010) defines corporate planning as the process of drawing up detailed action plans to achieve an organisational goals and objectives, taking into account the resources of the organisation and the environment within which it operates. It represents a formal structured approach to achieving objectives and to implementing the corporate strategy of an organisation.

Bryson (n.d) sees strategic planning as a disciplined effort to produce fundamental decisions and actions that shape and guide what an organisation is, what it does, and why it does it, with a focus on the future. A word-by-word dissection of this definition provides the key elements that underlie the meaning and success of a strategic planning process. The process is strategic because it involves preparing the best way to respond to the circumstances of the organisation environment, whether or not its circumstances are known in advance; nonprofits often must respond to dynamic and even hostile environments.

Andrews (1987) described corporate strategy as the identification of the purpose of the organisation and the plans and actions to achieve that purpose. It is the pattern of major objectives, purposes or goals and essential policies or plans for achieving those goals, stated in such a way as to define what business the company is in or is to be in and the kind of company it is or is to be.

An inference from the above definitions showed that the concepts mean the same thing but are just semantically different.

SELF-ASSESSEMENT EXERCISE

Do you agree that corporate planning, strategic planning and corporate strategy are the same? Give reasons for your answer.

3.2 Core Areas of Strategy

Three core areas of corporate strategy are strategic analysis, strategic development and strategy implementation.

1. **Strategic analysis**: The organisation, its mission and objectives have to be examined and analysed. Corporate strategy provides value for the people involved in the organisation – its stakeholders – but it is often the senior managers who develop the

view of the organisation's overall objectives in the broadest possible terms. They conduct an examination of the objectives and the organisation's relationship with its environment. They will also analyse the resources of the organisation.

2. **Strategy development:** The strategy options have to be developed and then selected. To be successful, the strategy is likely to be built on the particular skills of the organisation and the special relationships that it has or can develop with those outside – suppliers, customers, distributors and government. For many organisations, this will mean developing advantages over competitors that a sustainable over time. There are usually many options available and one or more will have to be selected.
3. **Strategy implementation**; The selected options now have to be implemented. There may be major difficulties in terms of motivation, power relationships, government negotiations, company acquisitions and many other matters. A strategy that cannot be implemented is not worth the paper it is written on.

3.3 Process, Content and Context

Research (Pettigrew and Whipp, 1991) has shown that in most situations, corporate strategy is not simply a matter of taking a strategic decision and then implementing it. It often takes a considerable time to make the decision itself and then another delay before it comes into effect. There are two reasons for this. First, people are involved – managers, employees, suppliers and customers for example. Any of these people may choose to apply their own business judgement to the chosen corporate strategy. They may influence both the initial decision and the subsequent actions that will implement it. Second, the environment may change radically as the strategy is being implemented. This will invalidate the chosen strategy and mean that the process of strategy development needs to start again. For these reasons, an important distinction needs to be drawn in strategy development between process, content and context.

Every strategic decision involves the following.

1. **Context:** The environment within which the strategy operates and is developed. In the IBM case during the 1980s, the context was the fast-changing technological development in personal computers.
2. **Content:** The main actions of the proposed strategy. The content of the IBM strategy was the decision to launch the new PC and its subsequent performance in the market place.
3. **Process:** This involves how the actions link together or interact with each other as the strategy unfolds against what may be a

changing environment. The process in the IBM case was the delay in tackling the PC market, the slow reaction to competitive actions and the interactions between the various parts of the company as it attempted to respond to competition actions. Process is thus the means by which the strategy will be developed and achieved.

Two approaches to the process are: prescriptive and emergent. A prescriptive corporate strategy is one whose objective has been defined in advance and whose main elements have been developed before the strategy commences. Emergent corporate strategy, on the other hand, is a strategy whose final objective is unclear and whose elements are developed during the course of its life, as the strategy proceeds. Mintzberg (1987) sees merit in both approaches. According to him, in many respects, they can be said to be like the human brain, which has both a rational left side and an emotional right side. Both sides are needed for the brain to function properly. It can be argued that the same is true in corporate strategy.

3.4 What makes a "Good" Strategy?

Given the lack of agreement on a definition of corporate strategy and the difficulty of developing it successfully, it is relevant to explore what makes a "good" corporate strategy. To some, it might appear that there is one obvious answer, that is, ""good" strategy delivers the purpose set out for the strategy in the beginning." However, this begs several important questions such as:

1. Was the purpose itself reasonable? For example, perhaps the purpose was so easy that any old strategy would be successful.
2. What do we do when it is difficult to define the purpose clearly, beyond some general objective of survival or growth? Such vagueness may make it difficult to test whether a "good" strategy has been developed.
3. Since the whole purpose of strategy is to explore what we do in the future, can we afford to wait until it has been achieved before we test whether it is good?

Essentially, we need some more robust tests of good strategy. These lie in two areas. First, those related to the real world of the organisation and its activities: application-related. Second, those that rely on the disciplines associated with the basic principles of academic rigour, originality, logical thought and scientific method. It might be argued that academic rigour has no relevance to the real world, but this would be wrong. All organisations should be able to apply these basic principles to the process of strategy development.

(a) **Tests of good strategy (application-related):** At least three tests are available that provide some means of assessing whether a strategy is good:

1. **The value-added test**: A good strategy will deliver increased value added in the market place. This might show itself in increased profitability, and might also be visible in gains in longer-term measures of business performance such as market share, innovative ability and satisfaction for employees.
2. **The consistency test:** A good strategy will be consistent with the circumstances that surround a business at any point in time. It will take into account its ability to use the resources efficiently, its environment, which may be changing fast or slowly, and its organisational ability to cope with the circumstances of that time.
3. **The competitive advantage test:** For most organisations, a good strategy will increase the sustainable competitive advantage of the organisation. Even those organisations that traditionally may not be seen as competing in the market place – such as charities or government institutions – can be considered as competing for resources. Charities compete with others for new funds, government departments compete with each other for a share of the available government funds.

(b) **Tests of good strategy (academic-related)**: Another five tests might also be employed that relate to the above but are more fundamental to the basic principles of originality, logical thought and scientific method:

1. **The originality test:** The best strategy often derives from doing something totally different. One test that has academic validity is therefore that of originality. However, this need to be used with considerable caution or it becomes just another excuse for wild and illogical ideas that have no grounding in the topic.
2. **The purpose test:** Even if there are difficulties in defining purpose, it is logical and appropriate to examine whether the strategies that are being proposed make some attempts to address whatever purpose has been identified for the organisation. Such a definition of purpose might be taken to include the aspirations and ambitions of the leaders of the organisation, along with its stakeholders.
3. **The logical consistency:** Do the recommendations flow in a clear and logical way from the evidence used? And what

confidence do we have in the evidence used? Do we trust such evidence? Might it be unreliable because it has come from a competitor?

4. **The risk and resources test:** Are the risks and resources associated with the strategies sensible in relation to the organisation? They might be consistent with the overall purpose, require resources that are substantially beyond those available to the organisation – not just finance, but perhaps people and skills.
5. **The flexibility test:** Do the proposed strategies lock the organisation into the future regardless of the way the environment and the resources might change? Or do they allow some flexibility, depending on the way that competition, the economy, the management and employees and other material factors develop?

3.5 Objectives of Corporate Planning

The basic purpose of corporate planning, according to Aghedo (2010), is to improve strategic decision-making in the organisation so that resources and talents or skills are applied to the most profitable uses. It is therefore targeted at enhancing the corporate performance. Corporate planning serves the following objectives.

- It assists in the fair and reasonable allocation of resources among divisions and units.
- It helps top management level in the analysis and consideration of alternative course of action so new opportunities are identified and exploited.
- It ensures that organisations adjust to environment opportunities and threats thereby ensuring a better fit between the business and its environment.
- It makes it easy for the objectives set, strategy and tactics to be appraised regularly.
- It encourages internal examination of the firm's internal strengths and weaknesses.
- It equally develops futuristic outlook for the organisation.

3.6 Benefits, Limitations and Causes of Failure in Corporate Planning

Benefits of Corporate Planning

Several benefits accrue from a sound and effective corporate planning. They are as follows.

- It provides a comprehensive view of the company.
- It creates clarity of purpose and better awareness of corporate goals and problems.
- It improves the ability of a firm to cope with changes and uncertainties.
- It encourages innovative thought and creativity thereby introducing a spirit of dynamism in the organisation.
- It helps to improve communication at all levels of the organisation.
- It helps to take risks and think ahead.
- It helps to improve the motivation, morale and job satisfaction of employees.
- It also improves the quality of managerial decisions.
- It provides a new way of controlling the business.

Limitations of Corporate Planning

The limitations of corporate planning according to Aghedo (2010) include the following:

- it is time-consuming and expensive
- it is not useful in a dying company
- it does not guarantee that the company will not be affected by adverse circumstances
- it involves a measure of judgement
- it is subjective and subject to errors
- it cannot produce results – timely and appropriate actions are required for success
- the programme cannot be suddenly started and expected to be an overnight success.

Causes of Failure in Corporate Planning

Several reasons abound why corporate planning fails. They include:

- lack of support from top management
- narrow outlook to issues coming from a unit or department

- inability to recognise the multiplicity of objectives
- the rules of bureaucracy
- overemphasis on short-term results to the neglect of long-term goals
- poor and ineffective communication system
- failure to devote sufficient resources
- failure to allow the planning organisation to grow to maturity
- too much reliance on committees
- faulty implementation of the plans.

3.7 Difference between Strategic Planning and Long-range Planning

Mintzberg (1987) states that though many uses these terms interchangeably; strategic planning and long-range planning differ in their emphasis on the "assumed" environment. Long-range planning, according to him, is generally considered to mean the development of a plan for accomplishing a goal or set of goals over a period of several years, with the assumption that current knowledge about future conditions is sufficiently reliable to ensure the plan's reliability over the duration of its implementation. On the other hand, strategic planning assumes that an organisation must be responsive to a dynamic, changing environment (not the more stable environment assumed for long-range planning).

Certainly, a common assumption has emerged in the non-profit sector that the environment is indeed changeable, often in unpredictable ways. Strategic planning, then, stresses the importance of making decisions that will ensure the organisation's ability to successfully respond to changes in the environment.

3. 7.1 What Strategic Planning Is Not!

Everything said above to describe strategic planning can also provide an understanding of what it is not. For instance, strategic planning is about fundamental decisions and actions, but it does not attempt to make future decisions (Steiner, 1979). Strategic planning involves anticipating the future environment, but the decisions are made in the present. This means that over time, the organisation must stay abreast of changes to make the best decisions it can at any given point - it must manage, as well as plan, strategically. Strategic planning has also been described as a tool - but it is not a substitute for the exercise of judgement by leadership.

Ultimately, the leaders of any enterprise need to sit back, ask and answer such questions as, "What are the most important issues to respond to?" And "How shall we respond?" Just as the hammer does not create the bookshelf, so the data analysis and decision-making tools of strategic planning do not make the organisation work - they can only support the intuition, reasoning skills, and judgment that people bring to their organisation.

Finally, strategic planning, though described as disciplined, does not typically flow smoothly from one step to the next. It is a creative process, and the fresh insight arrived at today might very well alter the decision made yesterday. Inevitably the process moves back and forth several times before arriving at the final set of decisions. Therefore, no one should be surprised if the process feels less like a comfortable trip on a commuter train, but rather like a ride on a roller coaster. But even roller coaster cars arrive at their destination, as long as they stay on track!

3.7.2 When Should a Strategic Plan be Developed?

Strategy development follows the creation and affirmation of the organisation's purpose statement, environmental and programme data collection and analysis, and identification of critical issues. It is critical that strategy development follow these steps because the information gathered and decisions made in these phases are the foundation for strategy creation and selection. Each of these steps provides the purpose statement, statement of the organisation's ultimate goal, and direction to which the strategies should ultimately lead.

External market data and programme evaluation results provide critical data to support strategy development. Without this information and insight, the organisation's strategies will not be in alignment with or effective in the marketplace. The critical issues list serves as the specific focus and framework for the activities of the organisation and the pattern of these activities (developing and selecting the strategies).

4.0 CONCLUSION

Corporate planning involves selecting the missions and objectives as well as the actions to achieve them. It requires decision-making, which means choosing future course of action from among alternatives. We note from the unit that corporate planning, corporate strategy and strategic planning are different concepts but they all mean the same thing.

The unit identified three core areas of corporate strategy which include strategic analysis, strategic development and strategic implementation. By strategic analysis we mean examination of the organisation, its mission and objectives to provide value for the stakeholders. Strategic development means building on the particular skills of the organisation and the special relationships that it has or can develop with those outside for optimum benefits. In a nutshell, it means developing advantages over competitors for sustainability over time. Strategy implementation means putting all the selected options into action.

Every strategic decision involves the environment, which the strategy operates and is developed, the main actions of the proposed strategy and how the actions link together or interact with each other as the strategy unfolds against what may be a changing environment. There are two approaches to the process, namely: prescriptive and emergent approaches.

The main objective of corporate planning is to improve strategic decision making in the organisation so that resources and talents or skills are applied to the most profitable uses. Other objectives include, assisting in fair and reasonable allocation of resources among divisions and units, helping top management level in the analysis and consideration of alternative course of action, ensuring that organisation adjust to environment opportunities and threats thereby aiding better fit between the business and its environment, etc.

There are benefits, limitations and causes of failure in corporate planning. These are also specified in the unit and you can always refer to them.

Long-range planning means the development of a plan for accomplishing a goal or set of goals over a period of time while strategic planning is the ability to make decisions that will ensure the organisation's ability to successfully respond to changes in the environment.

5.0 SUMMARY

In this unit, we defined the concept of planning and discussed extensively corporate planning, corporate strategy and strategic planning.

6.0 TUTOR-MARKED ASSIGNMENT

i. What do you understand by the term corporate planning? Why do corporate plan fail and what can be done to ensure its success?

ii. What makes a good strategy? List and discuss any three.
iii. When should a strategic plan be made?

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UNIT 4 OBJECTIVES OF PLANNING

CONTENTS

1.0 INTRODUCTION

In this last unit, define the concept of planning defined and discussed extensively corporate planning, corporate strategy and strategic planning.

In this unit, we shall examine the objectives as the foundation of planning. This study will enumerate the various types of objectives; discuss management by objectives as a tool for management effectiveness.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- describe objectives as the foundation of planning
- discuss the nature of objective
- explain what is meant by multiplicity of objectives
- differentiate between real and state objectives
- discuss traditional objectives
- determine how to set objectives.

3.0 MAIN CONTENT

3.1 Objectives: The Foundation of Planning

Motz (1987) refers to objectives as goals. He states that the two terms "objectives" and "goals" are often used interchangeably. The two terms are defined as the desired outcomes for individuals, groups, or entire organisations. They provide the direction for all management decisions and form the criterion against which actual accomplishment can be measured. This is why they are called the foundation of planning.

Weihrich and Koontz (2005), on the other hand, defined objectives as the important ends toward which organisational and individual activities are directed. According to them, within the context of discussion, it will become clear whether the objectives are long term or short term, broad or specific. The emphasis is on verifiable objectives, which means at the end of the period, it should be possible to determine whether or not the objective has been achieved.

The goal of every manager is to create a surplus (in business organisations, this means profit). Clear and verifiable objectives facilitate measurement of the surplus as well as the effectiveness and efficiency of managerial actions.

3.2 Nature of Objectives

Objectives state end results, and overall objectives need to be supported by sub-objectives. Thus, objectives form a hierarchy as well as a network. Moreover, organisations and managers have multiple goals that are sometimes incompatible and may lead to conflicts within the organisation, group, and even within individuals. A manager may have to choose between short-term and long-term performance, and personal interests may have to be subordinated to organisational objectives.

3.2.1 Hierarchy of Objectives

Objectives form a hierarchy, ranging from the broad aim to specific individual objectives. The zenith of the hierarchy is the purpose or mission; it has two dimensions. First, there is the social purpose, such as contributing to the welfare of people by providing goods and services at a reasonable price. Second, there is the mission or purpose of business, which might be to furnish convenient, low-cost transportation for the average person. The stated mission might be to produce, market, and service automobiles. As you will notice, the distinction between purpose and mission is a fine one, and therefore many writers and

practitioners do not differentiate between the two terms. At any rate, these aims are in turn translated into general objectives and strategies such as designing, producing, and marketing reliable, low-cost, fuel-efficient automobiles.

The next level of hierarchy contains more specific objectives, such as those in the key result areas. These are the areas in which performance is essential for the success of the enterprise. Although there is no complete agreement on what the key result areas of a business should be – and they may differ between enterprises – Peter F. Drucker suggests the following: market standing, physical and financial resources, profitability, manager performance and development, worker performance and attitude, and public responsibility. More recently, two other key result areas have become of strategic importance: service and quality. Examples of objectives for key areas are the following: to obtain a 10 per cent return on investment by the end of calendar year 2005 (profitability); to increase the number of units of product X produced by seven per cent by June 30, 2005 without raising costs or reducing the current quality level (productivity).

3.2.2 Multiplicity of Objectives

Objectives are normally multiple. For example, merely stating that a university's mission is education and research is not enough. It would be much more accurate (but still not verifiable) to list the overall objectives which might include the following:

- attracting students of high quality
- offering basic training in the liberal arts and sciences as well as in certain professional fields
- granting postgraduate degrees to qualified candidates
- attracting highly regarded professors
- discovering and organising new knowledge through research
- operating as a private school supported principally through tuition and gifts of alumni and friends.

Likewise, at every level in the hierarchy of objectives, goals are likely to be multiple. Some people think that a manager cannot effectively pursue more than two to five objectives. The argument is that too many objectives tend to weaken their drive for accomplishment, but the limit of two to five objectives seems too arbitrary; managers might pursue more significant objectives. It would be wise to state the relative importance of each objective so that major goals receive more attention than lesser ones. At any rate, the number of objectives managers should realistically set for themselves depends on how much they will achieve

themselves and how much they can assign to subordinates, thereby limiting their role to one of assigning, supervising, and controlling.
At first glance, it might appear that organisations have a single objective: for business firms, to make a profit; for not-for-profit organisations, to efficiently provide a service. But a closer analysis reveals that all organisations have multiple objectives, businesses also seek to increase market share and satisfy employee welfare. A church provides a place for religious practices but also assists the underprivileged in its community and acts as a social gathering place for church members. No one single measure can evaluate effectively whether an organisation is successful. Emphasis on one goal, such as profit, ignores other goals that must also be reached if long-term profits are to be achieved. Also, the use of a single objective (such as profit) can result in unethical practices because managers will ignore other important parts of their jobs in order to look good on that one measure.

3.2.3 Real versus Stated Objectives

Stated objectives are official statements of what an organisation says – and what it wants its various stakeholders to believe – its objectives are. However, stated objectives – which can be found in an organisation's charter, annual report, public relations announcements or in public statements made by managers – are often conflicting and excessively influenced by what society believes organisation should do.

The conflict in stated goals exists because organisations respond to a vast array of stakeholders. Unfortunately, these stakeholders frequently evaluate the organisation by different criteria. For example, when TWA was hoping for additional wage concessions from its unions, employees, who had already traded wage concessions for 30 per cent of the company's equity and who had not had a raise in 10 years, were not willing to once again postpone meaningful raises (Chandler, 1997). To the union's representatives, TWA's managers were saying that the company's cash position was declining and costs were soaring; the company's future was in doubt if the union did not cooperate. At the same time, managers were trying to reassure travel agents and potential passengers by saying the company was determine to continue flying and stay in business. TWA's managers had explicitly presented themselves in one way to the union and in another way to the public. Both goals were true but were in conflict.

The overall objectives stated by top management should be treated for what they are: "friction produced by an organisation to account for, explain, or rationalise to particular audiences rather than as valid and reliable indications of purpose" (Pfeffer, 1978 and Warriner, 1965). The content of objectives is substantially determined by what those

audiences want to hear. Moreover, it is simpler for managers to state a set of consistent, understandable objectives than to explain a multiplicity of objectives. If you want to know what an organisation's real objectives are, closely observe what members of the organisation actually do. Actions define priorities. For example, universities that proclaim the objectives of limiting class size, facilitating close student-faculty relations, and actively involving students in the learning process and then put their students into lecture classes of 300 or more are pretty common.

3.3 Traditional Objective Setting

The traditional role of objectives is to guide the control and direction imposed by an organisation's top managers. The president of a manufacturing firm tells the production vice president what he or she expects manufacturing costs to be for the coming year. The president tells the marketing vice president what level he or she expects sales to reach for the coming year. The city mayor tells his or her chief of police how much the departmental budget will be. Then, at some later point, performance is evaluated to determine whether the assigned objectives have been achieved.

The central them in traditional objective setting is that objectives are set at the top and then broken down into sub-goals for each level of an organisation. This traditional perspective assumes that top managers know what is best because only they can see the "big picture." Thus, the objectives that are established and passed down to each succeeding level of the organisation serve to direct and guide, and in some ways to constrain, individual employees' work behaviours. Employees' work efforts at the various organisational levels are then geared to meet the objectives that have been assigned in their areas of responsibility.

In addition to being imposed from above, traditional objective setting is often largely non-operational (Tuggle, 1978). If the top managers define the organisation's objectives in broad terms such as achieving "sufficient profits" or "market leadership", these ambiguous goals have to be made more specific as the objectives flow down through the organisation. At each level, managers supply operational meaning to the goals. Specificity is achieved as each manager applies his or her own set of interpretations and biases. What often results is that objectives lose clarity and unity as they make their way down from the top of the organisation to the lower levels (see figure 4.1 for illustration).

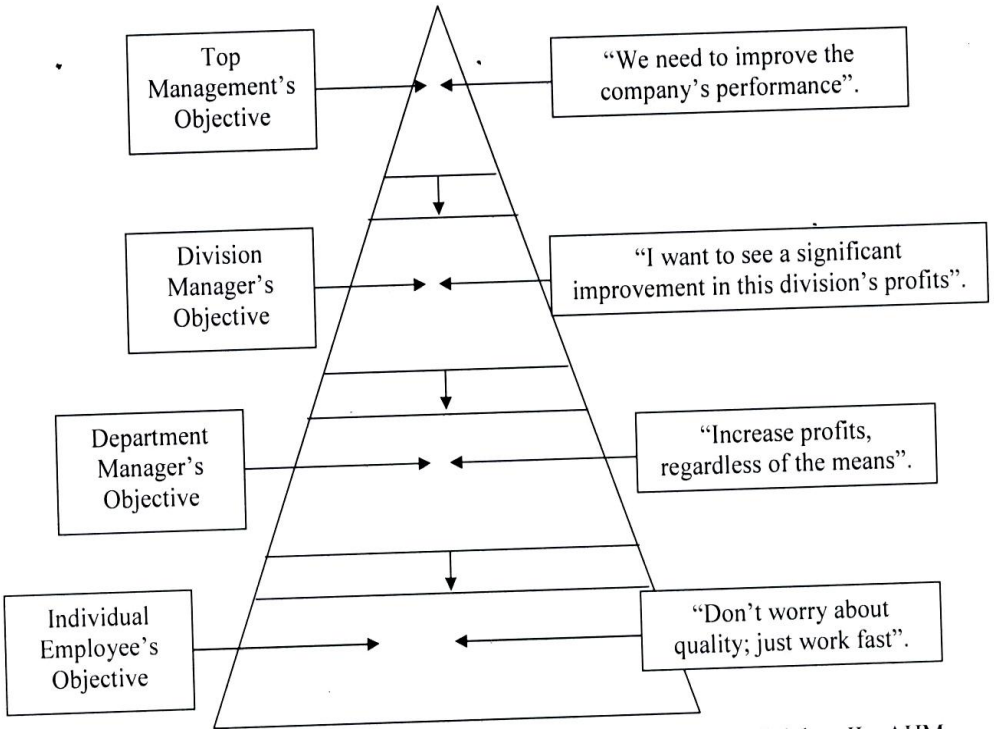

Fig.4.1: Traditional Objective Setting

Source: Tuggle, F.D. (1978). *Organisational Processes.* Arlington Heights, IL: AHM Publishing.

When the hierarchy of organisational objectives is clearly defined, it forms an integrated network of objectives, or a means-ends chain. Higher-level objectives or ends are linked to lower-level objectives, which serve as the means for their accomplishment. In other words, the goals at a lower level (means) must be achieved to reach the goals at the next level (ends). The accomplishment of goals at that level becomes the means to achieve the goals at the next level (ends). And so on and so forth, up through the different levels of the organisation.

3.4 How to Set Objectives

Without clear objectives, managing is haphazard. No individual and no group can expect to perform effectively and efficiently unless there is a clear aim. Table 4.1 illustrates some objectives and how they can be restated in a way that allows measurement.

3.4.1 Quantitative and Qualitative Objectives

To be measurable, objectives must be verifiable. This means that one must be able to answer this question: "At the end of the period, how do I

know if the objective has been accomplished?" For example, the objective of making a reasonable profit does not state how much profit is to be made, and what is reasonable to the subordinate may not be at all acceptable to the superior. In the case of such a disagreement, it is of course the subordinate who loses the argument. In contrast, a return on investment of 12 per cent at the end of the current fiscal year can be measured; it answers these questions: how much or what? When?

Table 4.1 Examples of non-verifiable and verifiable objectives

S/N	Non-verifiable objective	Verifiable objective
1.	To make a reasonable profit	To achieve a return on investment of 12 per cent at the end of the current fiscal year.
2.	To improve communication	To issue a two-page monthly newsletter July 1, 2005, involving not more than 40 working hours of preparation time (after the first issue).
3.	To improve productivity of the production department	To increase production output by five per cent by December 31, 2005, without additional costs while maintaining the current quality level.
4.	To develop better managers	To design and conduct a 40-hour in-house programme on the "fundamentals of management", to be completed by October 1, 2005, involving not more than 200 working hours of the management development staff and with at least 90 per cent of the 100 managers passing the exam (specified).
5.	To install a computer system	To install a computerized control system in the production department by December 31, 2005, requiring not more than 500 working hours of systems analysis and operating with not more than 10 per cent downtime during the first three months or two per cent thereafter.

At times, stating results in verifiable terms is more difficult. This is especially true when it involves the objectives for staff personnel and in government. For example, installing a computer system is an important task, but "to install a computer system" is not a verifiable goal. However, suppose the objective is "to install a computerised control system (with certain specifications) in the production department by

December 31, 2005, with an expenditure of not more than 500 working hours." Then, goal accomplishment can be measured. Moreover, quality can also be specified in terms of computer downtime, such as "the system shall be operational 90 per cent of the time during the first two months of operation."

3.4.2 Guidelines for Setting Objectives

Setting objectives is indeed a difficult task. It requires intelligent coaching by the superior and extensive practice by the subordinate. The guidelines shown in table 4.2 below will help managers in setting their objectives.

The list of objectives should not be too long, yet it should cover the main features of the job. As this unit has emphasised, objectives should be verifiable and should state what is to be accomplished and when. If possible, the quality desired and the projected cost of achieving the objectives should be indicated. Furthermore, objectives should present a challenge, indicate priorities, and promote personal and professional growth and development. These and other criteria for good objectives are summarised in the table below. Testing objectives against the criteria shown in the checklist is a good exercise for managers and aspiring managers.

Table 4.2: Checklist of Managers' Objectives

a. Do the objectives cover the main features of my job? ☐
b. Is the list of objectives too long? If so, can I continue some objectives? ☐
c. Are the objectives verifiable, i.e., will I know at the end of the period whether they have been achieved? ☐
d. Do the objectives indicate: ☐
a. Quantity (how much)? ☐
b. Quality (how well, or specific characteristics)? ☐
c. Time (when)? ☐
d. Cost (at what cost)? ☐
e. Are the objectives challenging yet reasonable? ☐
f. Are priorities assigned to the objectives (ranking, weight, etc.)? ☐
g. Does the set objectives also include:
    i. Improvement objectives? ☐
    ii. Personal development objectives? ☐
h. Are the objectives coordinated with those of other managers and organisational units? ☐
i. Are they consistent with the objectives of my superior, my department, and the company? ☐

j. Have I communicated the objectives to all who need to be informed? ☐
k. Are the short-term objectives consistent with the long-term aims? ☐
l. Are the assumptions underlying the objectives clearly identified? ☐
m. Are the objectives expressed clearly, and are they in writing? ☐
n. Do the objectives provide for timely feedback so that I can take any necessary corrective steps? ☐
o. Are my resources and authority sufficient for achieving the objectives? ☐
p. Have I given the individuals who are expected to accomplish the objectives a choice to suggest their objectives? ☐
q. Do my subordinates have control over aspects for which they are assigned responsibility? ☐

4.0 CONCLUSION

Planning involves selecting the missions and objectives as well as the actions to achieve them. It requires decision making, which means choosing a future course of action from among alternatives. Planning and controlling are closely interrelated. There are many types of plans, such as missions or purposes, objectives or goals, strategies, policies, procedures, rules, programmes and budgets. After objectives, making assumptions (premises) about the present and future environment, finding, evaluating alternative courses of action, and choosing a course will follow. Next, the manager must make supporting plans and devise a budget. These activities must be carried out with attention to the total environment. Short-range plans must of course be coordinated with long-range plans.

5.0 SUMMARY

In this unit, we have:

- described objectives as the foundation of planning
- discussed the nature of objectives
- explained what is meant by multiplicity of objectives
- differentiated between real and state objectives
- discussed traditional objectives
- determined how to set objectives
- defined the concept, management by objectives (MBO)
- stated and discussed the benefits and weaknesses of management by objectives.

6.0 TUTOR-MARKED ASSIGNMENT

i. What are objectives and why are they considered the foundation of planning?
ii. Why do not organisations have just one single objective?
iii. How would you identify an organisation's stated (real) objectives? What happens when an organisation has conflicting objectives?
iv. Contrast traditional objective setting and real objective setting.

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UNIT 5 CLASSIFICATION OF PLANNING

CONTENTS

1.0 INTRODUCTION

In the last unit, we described objectives as the foundation of planning, discussed the nature of objectives, explained what is meant by multiplicity of objectives, differentiated between real and state objectives, discussed traditional objectives, and determined how to set objectives.

In this unit, we shall examine planning according to classification and types.

2.0 OBJECTIVE

At the end of this unit, you should be able to:

- discuss planning based on its types and classifications.

3.0 MAIN CONTENT

3.1 Classification of Plans

Plans can be classified into the following components, namely:

- missions or purposes
- objectives or goals
- strategies
- policies
- procedures
- rules
- programmes
- budgets

The above classifications are discussed below.

3.1.1 Missions or Purposes

The mission or purpose (the terms are often used interchangeably), identifies the basic purpose or function or tasks of an enterprise or agency or any part of it. Every kind of organised operation has, or at least should have if it is to be meaningful, a mission or purpose. In every social system, enterprises have basic function or task assigned to them by society. For example, the purpose of a business generally is the production and distribution of goods and services. The purpose of state highway department is the design, building, and operation of a system of state highways. The purpose of the courts is the interpretation of laws and their application. The purpose of a university is teaching, research and providing services to the community. While a business, for example, may have a social purpose of packaging and distributing goods and services, it can accomplish this by fulfilling a mission of producing certain lines of products. The mission of an oil company, like Exxon, is to search for oil and to produce, refine, and market petroleum and petroleum products, from diesel fuel to chemicals. It is true that in some businesses and other enterprises, the purpose or mission often becomes fuzzy. For example, many conglomerates have regarded their mission as synergy, which is accomplished through the combination of a variety of companies.

3.1.2 Objectives or Goals

Objectives or goals (the terms are used interchangeably) are the ends toward which activity is aimed. They represent, not only the end point

of planning, but also the end toward which organising, staffing, leading, and controlling are aimed. The nature of objectives and management by objectives will be discussed in subsequent unit later.

3.1.3 Strategies

For years, the military used the word "strategies" to mean grand plans made in the light of what it was believed an adversary might or might not do. While the term still usually has a competitive implication, managers increasingly use it to reflect broad areas of an enterprise's operation. In this regard, strategy is defined as the determination of the basic long-term objectives of an enterprise and the adoption of courses of action and allocation of resources necessary to achieve these goals.

3.1.4 Policies

Policies are also referred to plans in that they are general statements or understandings that guide or channel thinking in decision making. Not all policies are statements; they are often merely implied from the actions of managers. The location of a company, for example, may strictly follow – perhaps convenience rather than policy – the practice of promoting from within; the practice may then be interpreted as policy and carefully followed by subordinates. In fact, one of the problems of managers is to make sure that subordinates do not interpret as policy minor managerial decisions that a not intended to serve as patters.

Policies define an area within which a decision is to be made and ensure that the decision will be consistent with, and contribute to, an objective. Policies help decide issues before they become problems; policies make it unnecessary to analyse the same situation every time it comes up, and unify other plans, thus permitting managers to delegate authority and still maintain control over what their subordinates do.

There are many types of policies. Examples include policies of hiring only university-trained engineers, encouraging employee suggestions for improved cooperation, promoting from within, conforming strictly to a high standard of high business ethics, setting competitive prices, and insisting on fixed, rather than cost-plus, pricing.

3.1.5 Procedures

Procedures are plans that establish a required method of handling future activities. They are chronological sequences of required actions. They are guides to action, rather than to thinking, and they detail the exact manner in which certain activities must be accomplished. For example,

the National Open University of Nigeria (NOUN) outlines three steps for its appraisal process, namely:

1. setting performance objectives
2. performing a mid-year review of the objectives
3. conducting a performance discussion at the end of the period.

Procedures often cut across departmental lines. For example, in a manufacturing company, the procedure for handling orders may involve the sales department (for the original order), the finance department (for acknowledgement of receipt of funds and for customer credit approval), the accounting department (for recording the transaction), the production department (for the order to produce the goods or the authority to release them from stock), and the shipping department (for determination of shipping means and route

3.1.6 Rules

Rules spell out specific required actions or non-actions, allowing no discretion. They are usually the simplest type of plan. For instance, "No smoking" is a rule that allows no deviation from a stated course of action. The essence of a rule is that it reflects a meaningful decision that a certain action must – or must not – be taken. Rules are different from policies in that policies are meant to guide decision making by marking off areas in which managers can use their discretion, while rules allow no discretion in their application.

3.1.7 Programmes

Programmes are a complex of goals, policies, procedures, rules, task, assignments, steps to be taken, resources to be employed, and other elements necessary to carry out a given course of action. They are ordinarily supported by budgets. They may be as major as an airline's programme to acquire $400 million fleet of jets or a five-year programme to improve the status and quality of its thousands of supervisors. Or they may be as minor as a programme formulated by a single supervisor to improve the morale of workers in the parts manufacturing department of a farm machinery company.

3.1.8 Budgets

A budget is a statement of expected results expressed in numerical terms. It may be called a "quantifiable" plan. In fact, the financial operating budget is often called a profit plan. A budget may be expressed in financial terms; in terms of labour-hours, units of product, or machine-hours; or in any other numerically measurable terms. It may deal with operation, as the expense budget does; it may reflect capital

outlays, as the capital expenditure budget does; or it may reflect show cash flow, as the cash budget does. One of the most comprehensive budgets is prepared by the Directorate of Budget in the Presidency. The budget proposal is then presented to the National Assembly by the President of the Federal Republic of Nigeria.

However, making a budget is clearly planning. The budget is the fundamental planning instrument in many companies. It forces a company to make in advance – whether for a week or for five years – a numerical compilation of expected cash flow, expenses and revenues, capital outlays, or labour-or-machine-hour utilisation. The budget is necessary for control, but it cannot serve as a sensible standard of control unless it reflects plans.

3.2 Types of Planning

The most popular ways to describe organisational plans are by their breadth (strategic versus operational), time frame (short-term versus long-term), specificity (directional versus specific), and frequency of use (single-use versus standing). Please note however that these planning classifications are not independent. For instance, short and long-term plans are closely related to strategic and operational ones. And single-use plans typically are strategic, long-term, and directional. Table 5.1 lists all these types of plans according to category.

Table 5.1: Types of Plans

Breadth	**Time Frame**	**Specificity**	**Frequency of Use**
Strategic Operational	Long term Short term	Directional Specific	Single use Standing

Source: Robbins, S.P. & Coulter, M. (1999). *Management* (2nd ed.). New Jersey: Prentice Hall, Upper Saddle River, 07458.

3.2.1 Strategic and Operational Plans

Strategic plans are plans that apply to the entire organisation, establish the organisation's overall objectives, and seek to position the organisation in terms of its environment. On the other hand, operational plans are plans that specify the details of how the overall objectives are to be achieved. The question now is how do strategic and operational plans differ?

Three differences between strategic and operational plans include time frame, scope, and whether they include a known set of organisational objectives (Ackoff, 1970). Operational plans tend to cover shorter

period. For instance, an organisation's monthly, weekly, and day-to-day plans are almost always operational. Strategic plans on the other hand tend to include an extended period – usually three years or more. They also cover a broader view of the organisation and deal less with specific areas. Finally strategic plans include the formulation of objectives, whereas operational plans assume the existence of objectives. Operational plans define ways to attain the objectives.

3.2.2 Short-Term versus Long-Term Plans

The difference in years between short-term and long-term plans has shortened considerably. It used to be that long-term meant anything over seven years. Try to visualise what you would like to be doing in seven years' time, then you would appreciate managers' challenge in establishing plans that are far in the future. As organisational environments have become more uncertain, the definition of long-term has changed. Long-term plans can therefore be defined as those with a time frame beyond three years (Hunger & Wheelen, 1996). We shall define short-term plans as those covering one year or less. The intermediate term is any time period in between. Although these time classifications are fairly common, an organisation can designate any time frame it wants for planning purposes.

3.2.3 Specific versus Directional Plans

Intuitively, it seems right that specific plans would be preferable to directional, or loosely guided, plans. Specific plans have already been defined objectives. There's no ambiguity, no problem with misunderstandings. For example, a manager who seeks to increase his or her firm's sales by 20 per cent over a given 12-month period might establish specific procedures, budget allocations, and schedules of activities to reach that objective. These are specific plans.

However, specific plans do have drawbacks. They require clarity and a sense of predictability that often do not exist. When uncertainty is high, management must be flexible to respond to unexpected changes, it is preferable to use directional plans (see table 5.1 above).

Directional plans identify general guidelines. They provide focus but do not lock managers into specific objectives or courses of action. Instead of detailing a specific plan to cut costs by four per cent and increase revenues by six per cent in the next six months, managers might formulate a directional plan for improving corporate profits by five to 10 per cent over the next six months. The flexibility inherent in directional plans is obvious. However, this advantage must be weighed against the loss of clarity provided by specific plans. Our three managers identified

in the opening dilemma would have to look at the usefulness of directional plans as opposed to more specific ones. It might be, at least at this point, more useful for them to use directional plans.

3.2.4 Frequency of Use

Some organisational plans that managers develop are ongoing; others are used only once. A single-use plan is a one-time plan that is specifically designed to meet the needs of a unique situation and is created in response to non-programmed decisions that managers make. For instance, top-level executives design a single-use plan to guide the creation and implementation of new service.

In contrast, standing plans are ongoing plans that provide guidance for activities repeatedly performed in the organisation. Standing plans are created in response to programmed decisions that managers make and include the policies, rules, and procedures that we defined in the previous topic.

4.0 CONCLUSION

Planning involves selecting the missions and objectives as well as the actions to achieve them. There are many types of plans, such as missions or purposes, objectives or goals, strategies, policies, procedures, rules, programmes and budgets. The mission or purpose identifies the purpose or function or tasks of an enterprise or agency or any part of it. For instance, the purpose of a business generally is the production and distribution of goods and services while the purpose of a university is teaching, research, learning and provision of community services. Objectives or goals are the ends toward which activity is aimed.

Strategy is the determination of the basic long-term objectives of an enterprise and the adoption of courses of action and allocation of resources necessary to achieve these goals. Policies are also plans in that they are general statements or understandings that guide or channel thinking in decision making. Procedures are plans that establish a required method of handling future activities and it often cut across departmental lines. Rules spell out specific required actions or non-actions, allowing no discretion. Programmes are a complex goals, policies, procedures, rules, task assignments, steps to be taken, resources to be employed, and other elements necessary to carry out a given course of action. These are ordinarily supported by budgets.

A budget is a statement of expected results expressed in numerical terms. It may be expressed in financial terms, in terms of labour-hours,

units of product, or machine-hours, or in any other numerically measurable terms. It may also deal with operation, as the expense budget does, and reflect capital outlays as the capital expenditure budget does. Plans can also be classified as short-term plans must of course be coordinated with long-term plans, strategic and operational, specific and directional as well as according to frequency of use.

5.0 SUMMARY

In this unit, we have:

- classified plans by types such as mission or purpose, objective or goal, strategy, policy, procedure, rules, programme and budget
- enumerate different types of plans such as strategic and operational, short-term and long-term, specific and directional as well as according to frequency of use.

6.0 TUTOR-MARKED ASSIGNMENT

i. What is a plan?
ii. Differentiate between strategic and operational plans.
iii. In what situations would you use long-term and short-term plans?
iv. Write short notes on the following.
    (a) Missions or purposes
    (b) Objectives or goals
    (c) Strategies
    (d) Policies
    (e) Procedures
    (f) Rules
    (g) Programmes
    (h) Budget

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UNIT 6 STEPS IN CORPORATE PLANNING

CONTENTS

1.0 INTRODUCTION

In the previous unit, we classified plans by types such as mission or purpose, objective or goal, strategy, policy, procedure, rules, programme and budget and enumerate different types of plans such as strategic and operational, short-term and long-term, specific and directional as well as according to frequency of use.

In this unit, we shall discuss the various steps involved in corporate planning.

2.0 OBJECTIVE

At the end of this unit, you should be able to:

- enumerate and discuss the various steps in corporate planning.

3.0 MAIN CONTENT

3.1 Steps in Corporate Planning

The practical steps listed below, and diagrammed in figure 3.1 are of general application. In practice, however, one must study the feasibility of possible courses of action at each stage.

For the purpose of clarity, the steps include:

- awareness of opportunities
- establishing objectives
- developing premises
- determining alternative courses
- evaluating alternative courses

- selecting a course
- formulating derivative plans
- quantifying plans by budgeting

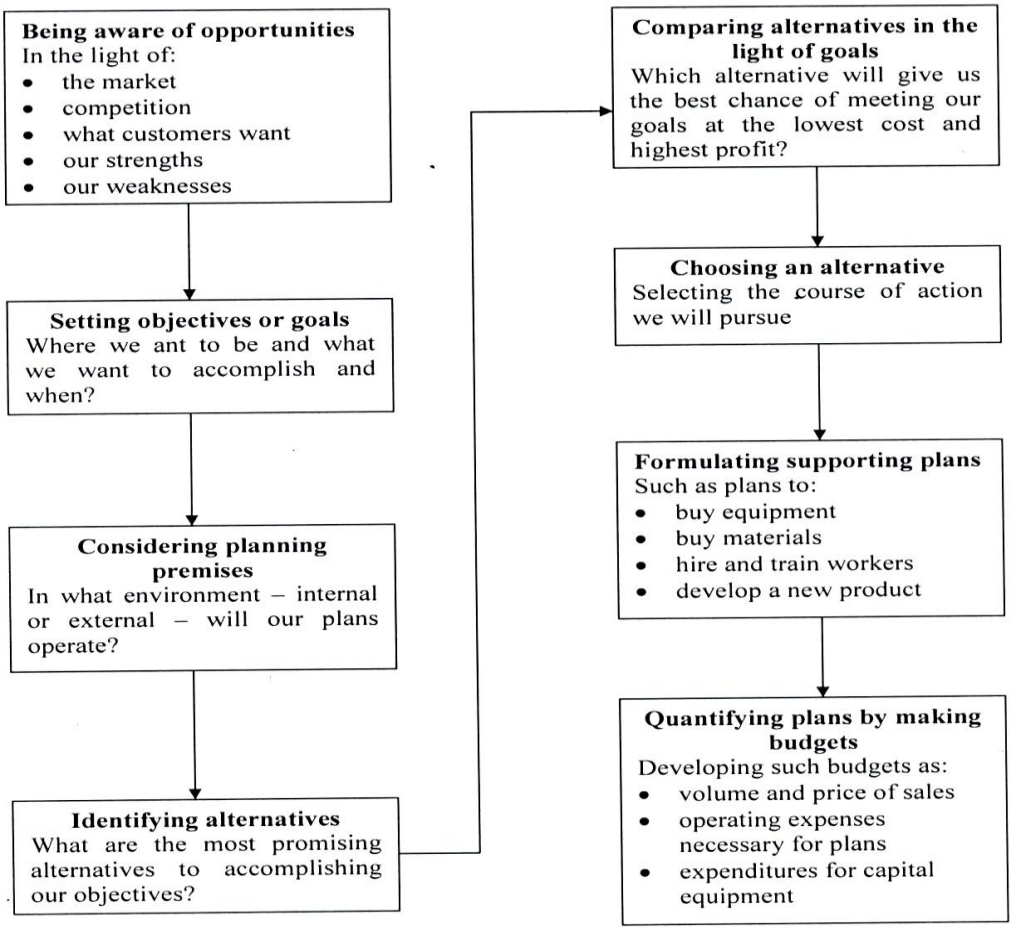

Fig.6.1: Steps in Planning

Source: Weihrich, H. & Koontz, H. (2005). *Management: A Global Perspective.* (11th ed.). Asia: Mc-Graw Hill Education.

Awareness of Opportunities

Although it precedes actual planning and is therefore not strictly a part of the planning process, an awareness of opportunities in the external environment as well as within the organisation is the real starting point for planning. All managers should take a preliminary look at possible future opportunities and see them clearly and completely, know where the company stands in the light of its strengths and weaknesses, understand what problems it has to solve and why, and know what it can expect to gain. Setting realistic objectives depends on this awareness. Planning requires a realistic diagnosis of the opportunity situation.

Establishing Objectives

The second step in planning is to establish objectives for the entire enterprise and then for each subordinate work unit. This is to be done for the long-term as well as for the short range. Objectives specify the expected results and indicate the end points of what is to be done, where the primary emphasis is to be placed, and what is to be accomplished by the network of strategies, policies, procedures, rules, budgets, and programmes.

Enterprise objectives give direction to the major plans, which, by reflecting these objectives, define the objective of every major department. Major departmental objectives in turn control the objectives of subordinate departments, and so on down the line. In other words, objectives form a hierarchy. The objectives of lesser departments will be more accurate if subdivision managers understand the overall enterprise objectives and the derivative goals. Managers should have the opportunity to contribute ideas to for setting their own goals and those of the enterprise.

Developing Premises

The next logical step in planning is to establish, circulate, and obtain agreement to use critical planning premises such as forecasts, applicable basic policies, and existing company plans. Premises are assumptions about the environment in which the plan is to be carried out. It is important for all the managers involved in planning to agree on the premises. In fact, the major principle of planning premises is this: "The more thoroughly individuals charged with planning understand and agree to use consistent planning premises, the more coordinated enterprise planning will be."

Forecasting is important in premising such issues as what kinds of markets will there be? What volume of sales? What prices? What products? What technical developments? What costs? What wage rates? What tax rates and policies? What new plants? What policies with respect to dividends? What political or social environment? How will expansion be financed? What are the long-term trends?

Determining Alternative Courses

The fourth step in planning is to search for and examine alternative courses of action, especially those not immediately apparent. There is seldom a plan for which reasonable alternatives do not exist, and quite often an alternative that is not obvious proves to be the best.

The more common problem is not finding alternatives but reducing the number of alternatives so that the most promising may be analysed. Even with mathematical techniques and the computer, there is a limit to the number of alternatives that can be thoroughly examined. The planner must usually make a preliminary examination to discover the most fruitful possibilities.

Evaluating Alternative Courses

After seeking out alternative course and examining their strong and weak points, the next step is to evaluate the alternatives by weighing them in the light of premises and goals. One course may appear to be the most profitable but may require a large cash outlay and have a slow payback; another may look less profitable but may involve less risk; still another may better suit the company's long-range objectives.

There are so many alternative courses in most situations and so many variables and limitations to be considered that evaluation can be exceedingly difficult.

Selecting a Course

This is the point at which the plan is adopted – the real point of decision making. Occasionally, an analysis and evaluation of alternative courses will disclose that two or more are advisable, and the manager may decide to follow several courses rather than the one best course.

Formulating Derivative Plans

When a decision is made, planning is seldom complete, and a seventh step is indicated. Derivative plans are almost invariably required to support the basic plan.

Quantifying Plans by Budgeting

After decisions are made and plans are set, the final set in giving them meaning, as was indicated in the discussions on types of plans, is to quantify them by converting them into budgets. The overall budget of an enterprise represents the sum total of income and expenses, with resultant profit or surplus, and the budgets of major balance sheet items such as cash and capital expenditures. Each department or programme of a business or some other enterprise can have its own budgets, usually of expenses and capital expenditures, which tie into the overall budget.

If done well, budgets become a means of adding the various plans and set important standards against which planning progress can be measured.

4.0 CONCLUSION

The unit identified the practical steps in corporate planning. Once an opportunity is recognised, a manager plans rationally by establishing objectives, making assumptions (premises) about the present and future environment, finding and evaluating alternative courses of action, and choosing a course to follow. Next, the manager must make supporting plans and devise a budget. These activities must be carried out with attention to the total environment.

5.0 SUMMARY

In this unit, we have examined the steps involved in planning. It ranged from awareness of opportunities, establishing objectives, developing premises, determining alternative courses, evaluating alternative courses, selecting a course, formulating derivative plans and quantifying plans into budget which would in turn serve as a standard for which the successful or otherwise of the project would be measured.

6.0 TUTOR-MARKED ASSIGNMENT

i. List the steps in planning and discuss each of them.
ii. Why do you need to quantify the plans into a budget?

7.0 REFERENCE/ FURTHER READING

Weihrich, H. & Koontz, H. (2005). *Management: A Global Perspective.* (11th ed.). Asia: Mc-Graw Hill Education.

MODULE 2 ESSENTIALS OF PLANNING AND MANAGING BY OBJECTIVES

UNIT 1 DECISION MAKING I

CONTENTS

1.0 INTRODUCTION

In the last unit, we discussed the steps involved in planning. Decision is considered a major part of planning. As a matter of fact, given an awareness of an opportunity and a goal, the decision-making process is really not only the core of planning, but is in fact the essence of a manager's job. Thus, in this context, the process leading to making a decision might be thought of as premising, identifying alternatives, evaluating alternatives in terms of the goal sought; and choosing an alternative, that is, making a decision.

Although this unit emphasises the logic and techniques of choosing a course of action, the discussion will show that decision making is really one of the steps in planning. Discussion on decision making will be divided into two, namely: decision making I and decision making II. In this unit, we shall look at the first part of it which decision making as a concept, its process, pervasiveness of decision making, the role of a manager as decision maker.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- define decision making as a concept
- analyse decision making as a rational process
- state the roles and limitations of rational decision making
- explain decision-making process
- state the role of a manager as decision-maker.

3.0 MAIN CONTENT

3.1 Decision Making as a Concept

Individuals at all levels and in all areas of organisations make decisions. That is, they make choices from two or more alternatives. For instance, top-level managers make decisions about their organisation's goals, where to locate manufacturing facilities, what new markets to move into, and what products or services to offer. Middle and lower-level managers make decisions about weekly or monthly production schedules, handling problems that arise, allocating pay raises, and selecting or disciplining employees. Decision making is not something that just managers do. All organisational members make decisions that affect their jobs and the organisation they work for. How are decisions made? What is involved in making decisions? Although decision making is typically described as "choosing among alternatives;" however, that view is overly simplistic. This is because decision making is a comprehensive process not just a simple act of choosing among alternatives.

Weihrich and Koontz (2005) defined decision making as the selection of a course of action from among alternatives; it is at the core of planning. A plan cannot be said to exist unless a decision – a commitment of resources, direction, studies and analyses. Managers sometimes see decision making as the central job because they must constantly choose what is to be done, who is to do it, and when, and where, and occasionally even how it will be done. Decision making is, however, only a step in planning. Even when it is done quickly and with little thought or when it influences action for only a few minutes, it is part of planning. It is also part of everyone's daily life. A course of action can seldom be judged alone because virtually every decision must be geared to other plans.

3.2 Decision-Making Process

Figure 5.1 illustrates decision making process as a set of eight steps that begins with identifying a problem and decision criteria and allocating weights to those criteria. This is followed by developing, analysing, and selecting an alternative that can resolve the problem; implementing the alternative and evaluating the decision's effectiveness. This process is as relevant to your personal decision about where you will take your summer vacation as it is to a corporate action such as new programmes into the curriculum of a university. The process also can be used to describe both individual and group decisions. Let us take a closer look at the process in order to understand what each step involves.

Step 1 Identifying a Problem

The decision-making process begins with the existence of a problem or, more specifically, a discrepancy between an existing and a desired state of affairs (Pounds, 1969). To keep it simple, let us cite an example. Take the case of a sales manager whose sales representatives need new notebook computers because their old ones just do not have enough memory or are not fast enough to handle the volume of work anymore. Again, for simplicity sake, assuming that it is not economical to add memory to the old ones and that corporate headquarters requires that the managers purchase new computers rather than lease them. Now we have a problem. There is a disparity between the need of the sales representatives to have large, fast notebooks and their having ones that are at capacity and slow. The sales manager has a decision to make.

Unfortunately, this example does not tell us much about how managers identify problems. In the real world, most problems do not come with neon signs in bright bold colours flashing "problem." The sales representatives' complaints about slow computers with disk drives at capacity might be a clear signal to the sales manager that she needs to get new notebook computers, but few problems are quite obvious. For instance, is a five per cent decline in sales a problem? Or are declining sales merely a symptom of another problem, such as product obsolescence or poor advertising? Also, keep in mind that one manager's problem is another manager's satisfactory state of affairs. Problem identification is subjective. Furthermore, the manager who mistakenly solves the wrong problem perfectly is likely to perform just as poorly as the manager who fails to identify the right problem and does nothing. Problem identification is neither a simple nor an insignificant step of the decision making process (Volkema, 1987). Before something can be characterised as a problem, managers have to be aware of the discrepancy, they have to be under pressure to take

action, and they must have the resources necessary to take action (McCall & Kaplan, 1985).

How do managers become aware they have a discrepancy? They obviously have to make a comparison between their current state of affairs and some standard. What is that standard? It can be past performance, previously set goals, or the performance of some other unit within the organisation or in other organisations. In our computer purchase example, the standard is past performance – having computers that hold all the critical product and sales information so that the sales representatives can efficiently run the desired programmes. A discrepancy without pressure becomes a problem that can be put off to some future time. To initiate the decision process, then, the problem also must be such that it exerts some type of pressure on the manager to act. Pressure might include organisational policies, deadlines, financial crises, complaints from customers or subordinates, expectations from the boss, or an upcoming performance evaluation.

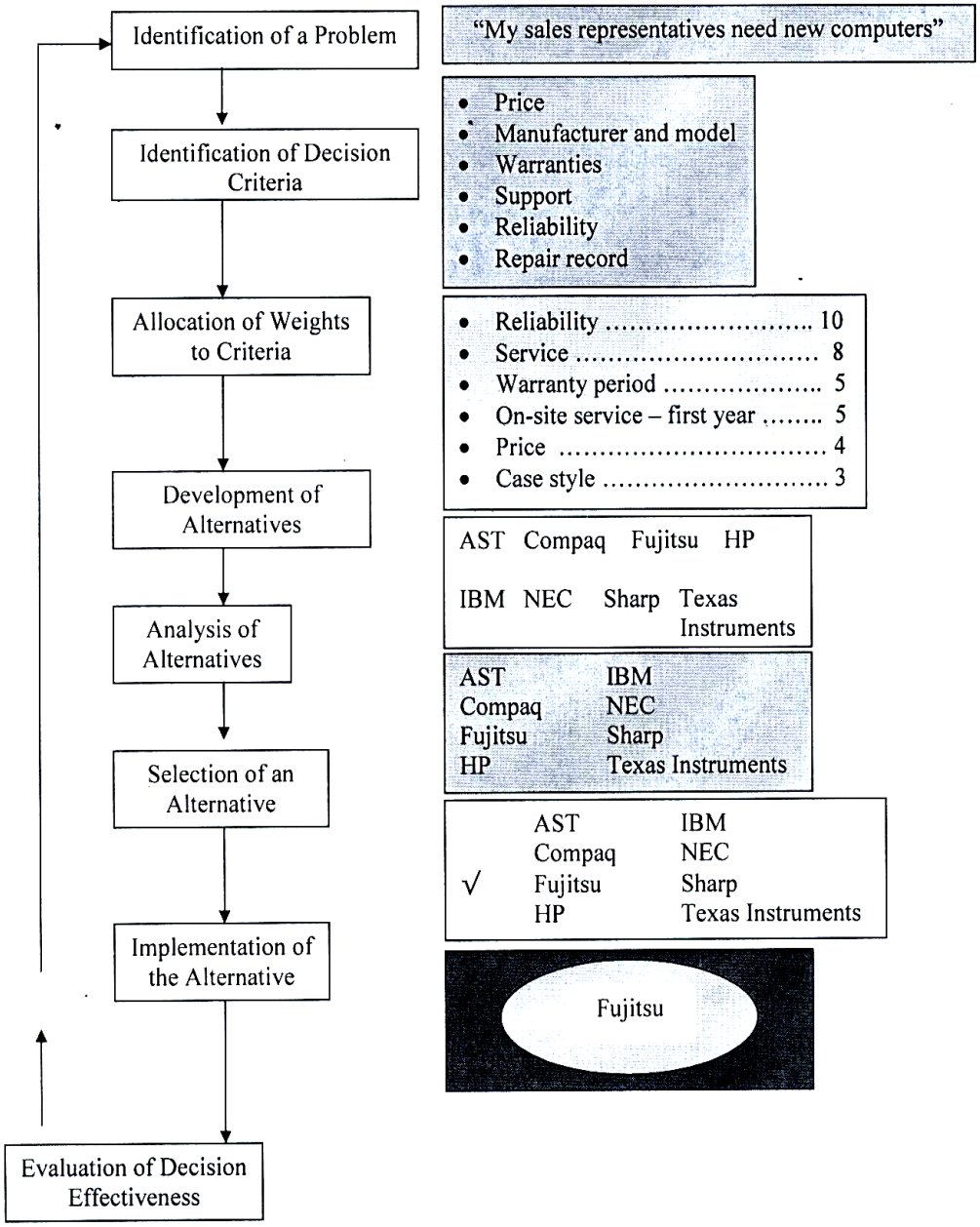

Fig. 1.1: The Decision-Making Process

Source: Pounds, W. (1969). "The Process of Problem Finding." *Industrial Management Review, Fall*, pp. 1 – 19.

Finally, managers are not likely to characterise something as a problem if they perceive that they do not have the authority, budget, information, or other resources necessary to act on it. When managers perceive a problem and are under pressure to act, but feel that they have inadequate resources, they usually describe the situation as one in which unrealistic expectations are being placed on them. Figure 1.2 shows the characteristics of a problem.

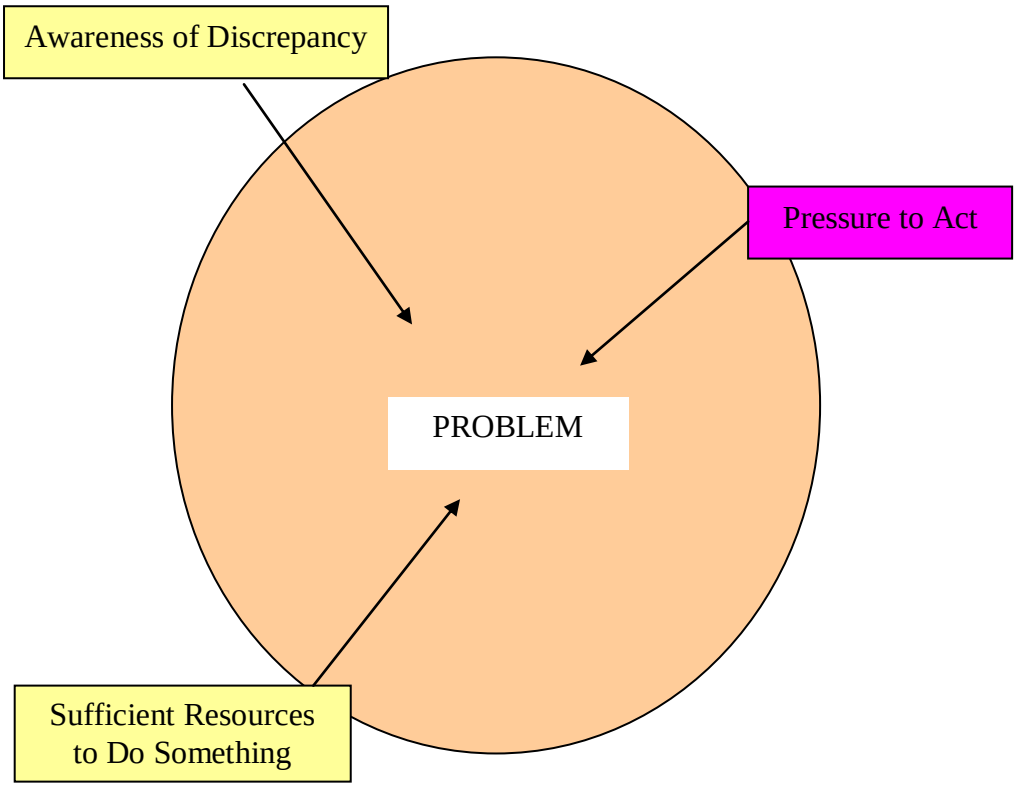

Fig.1.2: Characteristics of a Problem

Source: Pounds, W. (1969). "The Process of Problem Finding." *Industrial Management Review, Fall*, pp. 1 – 19.

Step 2 Identifying Decision Criteria

Once a manager has identified a problem that needs attention, the decision criteria important to resolving the problem must be identified. That is, managers must determine what is relevant in making a decision. In our computer purchase example, the sales manager has to assess what factors are relevant to her decision. These might include criteria such as price, product model and manufacturer, standard features, optional equipment, service warranties, repair record, and service support after purchase. These criteria reflect what the sales manager thinks is relevant in her decision. That is, whether they are explicitly stated or not (every decision maker has criteria that guide his or her decisions). Note that in this step in the decision-making process, what is not identified is as important as what is. If the sales manager does not consider a service warranty to be a criterion, then it will not influence her final choice of computers. Thus, if a decision-maker does not identify a particular feature as a criterion in this second step, it is treated as irrelevant.

Step 3 Allocating Weights to the Criteria

The criteria listed in the previous step are not all equally important, so the decision maker must weigh the items to give them the correct priority in the decision. How do you weight criteria? A simple approach is merely to give the most important criterion a weight of 10 and then assign weights to the rest against that standard. Thus, in contrast to a criterion that you gave a weight of five, the highest factor would be twice as important. Of course, you could use 100 or 1,000 or any number you select as the highest weight. The idea is to use your preferences to assign a priority to the relevant criteria in your decision as well as to indicate their degree of importance by assigning a weight to each. Table 5.1 lists the criteria and weights that our sales manager developed for her computer replacement decision. Reliability is the most important criterion in her decision, with such factors as case style and price having low weights.

Table 1.1: Criteria and Weights for Computer Replacement Decision

Criterion	Weight
Reliability	10[a]
Service	8
Warranty period	5
On-site service – first year	5
Price	4
Case style	3

[a] In this example, the highest rating for a criterion is 10 points.

Source: Pounds, W. (1969). "The Process of Problem Finding." *Industrial Management* Review, *Fall*, pp. 1 – 19.

Step 4 Developing Alternatives

The fourth step requires the decision maker to list the viable alternatives that could resolve the problem. No attempt is made in this step to evaluate these alternatives, only to list them. Let us assume that our plant manager has identified eight notebook computer models as viable choices. These are AST Ascentia A 42, Compaq Armada 4100, Fujitsu LifeBook 555T, HP OmniBook 5500CT, IBM ThinkPad 760ED, NEC Versa 2435CD, Sharp WideNote W-100T, and Texas Instruments TravelMate 6050.

Step 5 Analysing Alternatives

Once the alternatives have been identified, the decision maker must critically analyse each one. The strengths and weaknesses of each alternative become evident as they compared with the criteria and weights established in steps two and three. Each alternative is evaluated by appraising it against the criteria. Table 5.2 shows the assessed values that the plant manager gave each of her eight alternatives after she had talked to computer experts and read the latest information from computer magazines.

Bear in mind that the ratings given the eight computer models shown in Table 5.2 are based on the personal assessment made by the sales manager. Again, we are using a-one to 10 scale. Some assessments can be achieved in relatively objective fashion. For instance, the purchase price represents the best price the manager can get from local retailers, and consumer magazines report performance data from users. However, the assessment of reliability is clearly a personal judgement. The point is that most decisions contain judgements. They are reflected in the criteria chosen in step two, the weights given to the criteria, and the evaluation of alternatives. This explains why two computers buyers with the same amount of money may look at two totally different sets of alternatives or even looks at the same alternatives and rates them differently.

Table 5.2 represents only an assessment of the eight alternatives against the decision criteria. It does not reflect the weighting done in step three. If one choice had scored 10 on every criterion, you would not need to consider the weights. Similarly, if the weights were all equal, you could evaluate each alternative merely by summing up the appropriate lines in Table 5.2. For instance, the AST Ascentia A42 would have a score of 34, and the IBM ThinkPad 760ED a score of 45. If you multiply each alternative assessment (table 5.2) against its weight (table 5.1), you get table 5.3. The sum of these scores represents an evaluation of each alternative against the previously established criteria and weights. Notice that the weighting of the criteria has significantly changed the ranking of alternatives in our example.

Table 1.2: Assessed Values of Notebook Computer Alternatives against Decision Criteria

Model	Reliability	Service	Warranty	On-site Service	Price	Case Style
AST Ascentia A42	8	3	5	10	3	5
Compaq Armada 4100	8	5	10	5	6	5
Funjitsu LifeBook 555T	10	8	5	10	3	10
10HP OmniBook 5500CT	8	5	5	10	3	10
IBM ThinkPad 760ED	6	8	5	10	6	10
NEC Versa 2435CD	10	8	5	5	3	10
Sharp WideNote W-100T	2	10	5	10	10	10
Texas Instrument TravelMate 6050	4	10	5	10	10	5

Source: Pounds, W. (1969). "The Process of Problem Finding." *Industrial Management Review, Fall,* pp. 1 – 19.

Model	Reliability	Service	Warranty	On-site Service	Price	Case Style	Total
AST Ascentia A42	80	24	25	50	12	15	206
Compaq Armada 4100	80	40	50	25	24	15	234
Funjitsu LifeBook 555T	100	64	25	50	12	30	281
HP OmniBook 5500CT	80	40	25	50	12	30	237
IBM ThinkPad 760ED	60	64	25	50	24	30	253
NEC Versa 2435CD	100	64	25	25	12	30	256
Sharp WideNote W-100T	20	80	25	50	40	30	245
Texas Instrument TravelMate 6050	40	80	25	50	40	15	250

Table 1.3: Assessed Values of Notebook Computer Alternatives against Criteria and Weights

Source: Pounds, W. (1969). "The Process of Problem Finding." *Industrial Management Review, Fall,* pp. 1 – 19.

Step 6 Selecting an Alternative

The sixth step is the critical act of choosing the best alternative from among those listed and assessed. We have determined all the pertinent factors in the decision, weighted them appropriately, and identified the viable alternatives. Now we merely have to choose the alternative that generated the highest score in step five. In our computer purchase example, (Table 5.3), the decision maker would choose the Fujitsu LifeBook 555T computer. On the basis of the criteria identified, the weights given to the criteria, and the decision maker's assessment of

each computer company's ranking on the criteria, the Fujitsu computer score highest (281 points) and thus became the "best" alternative.

Step 7 Implementing the Alternative

Although the choice process is completed in the previous step, the decision may still fall if it isn't implemented properly. Therefore, step seven is concerned with putting the decision into action. Implementation includes conveying the decision to those affected and getting their commitment to it. Groups or teams can help a manager achieve commitment. If the people who must carry out a decision participate in the process, they are more likely to enthusiastically support the outcome than if they are just told what to do. For instance, if in our decision example the sales representatives had participated in the purchase decision, they would be likely to enthusiastically accept the new machines and any new training necessary.

Step 8 Evaluating Decision Effectiveness

The last step in the decision-making process appraises the result of the decision to see whether the problem has been resolved. Did the alternative chosen in step six and implemented in step seven accomplish the desired result? What would happen if, as a result of this evaluation, the problem still existed? The manager would then need to dissect carefully what went wrong. Was the problem incorrectly defined? Were errors made in the evaluation of the various alternatives? Was the right alternative selected but improperly implemented? Answers to questions like those might send the manager back to one of the earlier steps. It might even require starting the whole decision process over.

3.3 Pervasiveness of Decision Making

Everyone in organisations makes decisions, but decision making is particularly important in every aspect of a manager's job. As Table 1.4 illustrates, decision making is part of all the four managerial functions. That is why managers – when they plan, organise, lead, and control – are frequently called decision makers. In fact, it is correct to say that decision making is synonymous with managing (Simon, 1960). The fact that almost everything a manager does involves decision making does not mean that decisions are always long, involved, or clearly evident to an outsider observer. Much of a manager's decision-making activity is routine. Every day of the year you make a decision about the problem of when to eat lunch. It is no big deal. You have made the decision thousands of times before. It offers few problems and can usually be handled quickly. It is the type of decision you almost forget is a decision. Managers make dozens of these routine decisions every day.

Keep in mind that even though a decision seems easy to make or has been faced by a manager a number of times before, it is a decision nonetheless.

Table 1.4: Decisions in the Management Functions

Planning:
What are the organisation's long-term objectives?
What strategies will best achieve those objectives?
What should the organisation's short-term objectives be?
How difficult should individual goals be?
Organising:
How many subordinates should I have report directly to me?
How much centralization should there be in the organisation?
How should jobs be designed?
When should the organisation implement a different structure?
Leading:
How do I handle employees who appear to be low in motivation?
What is the most effective leadership style in a given situation?
How will a specific change affect worker productivity?
When is the right time to stimulate conflict?
Controlling:
What activities in the organisation need to be controlled?
How should those activities be controlled?
When is a performance deviation significant?
What type of management information system should the organisation have?

Source: Pounds, W. (1969). "The Process of Problem Finding." *Industrial Management Review, Fall*, pp. 1 – 19.

3.4 The Manager as Decision Maker

Although we have described the steps in the decision-making process, we still do not know much about the manager as a decision maker and how decisions are actually made in organisations. How can we best describe the decision making situation and the person who makes the decision? In this section, we look at those issues and would start by looking at three perspectives on how decisions are made.

3.4.1 Making Decisions: Rationality, Bounded Rationality and Intuition

Managerial decision making is assumed to be rational. By that we mean that managers make consistent, value-maximising choices within specified constraints (Simon, 1986). What are the underlying assumptions of rationality, and how valid are those assumptions?

Assumptions of Rationality

A decision maker who was perfectly rational would be fully objective and logical. He or she would define a problem carefully and would have a clear and specific goal. Moreover, the steps in the decision making process would consistently led toward selecting the alternative that maximises the likelihood of achieving that goal. Figure 5.3 summarises the assumptions of rationality.

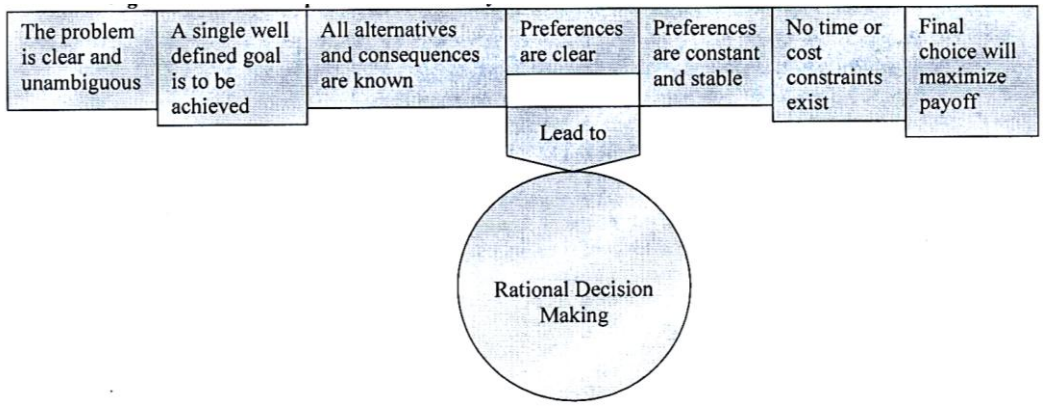

Fig. 1.3: Assumptions of Rationality

Source: Simon, H. (1986), "Rationality in Psychology and Economics." *Journal of Business*, October, pp. 209 – 224.

- **Problem clarity:** In rational decision making, the problem is clear and unambiguous. The decision maker is assumed to have complete information regarding the decision situation.
- **Goal orientation**: In rational decision making, there is no conflict over the goal. Whether the decision involves purchasing a new notebook computer; selecting a college to attend, choosing the proper price for a new product, or picking the right job applicant to fill a vacancy, the decision maker has a single, well-defined goal that he or she is trying to reach.
- **Known options:** In known options, it is assumed that the decision maker is creative, can identify all the relevant criteria, and can list all the viable alternatives. Further, the decision maker is aware of all the possible consequences of each alternative.
- **Clear preferences:** Rationality assumes that the criteria and alternatives can be ranked according to their importance.
- **Constant preferences:** In addition to a clear goal and preferences, it is assumed that the specific decision criteria are constant and that the weights assigned to them are stable over time.

- **No time or cost constraints**: The rational decision maker can obtain full information about criteria and alternatives because it is assumed that there are no time or cost constraints.
- **Maximum payoff**: The rational decision maker always chooses the alternative that will yield the maximum payoff.

Those assumptions of rationality apply to any decision. Because we are concerned with managerial decision making in an organisation, however, we need to add one further assumption. Rational managerial decision making assumes that decisions are made in the best "economic" interests of the organisation. That is, the decision maker is assumed to be maximising the organisation's interests, not his or her own interests. How realistic are these assumptions about rationality? Managerial decision making can follow rational assumptions if the manager is faced with a simple problem in which the goals are clear and the alternatives limited, in which the time pressures are minimal and the cost of seeking out and evaluating alternatives is low, for which the organisational culture supports innovation and risk taking, and in which the outcomes are relatively concrete and measurable (Shull, Delbecq & Cummings, 1970). However, most decisions that managers face in the real world do not meet all those tests (March, 1994 & Langley, Mintzberg, Pitcher, Posada, & Saint-Macary, 1995). So how are most decisions in organisations actually made? The concept of bounded rationality can help answer that question.

Bounded Rationality

Despite the limits to perfect rationality, managers are expected to follow the rational process when making decisions (March, 1981). Managers know that "good" decision-makers are supposed to do certain things, namely: identify problems, consider alternatives, gather information, and act decisively but prudently. Managers can thus be expected to exhibit the correct decision making behaviours. By doing so, managers show their superiors, peers, and subordinate that they are competent and that their decisions are the result of intelligent and rational deliberation.

Table 1.5: Two Views of the Decision-Making Process

S/N	Decision-making Step	Perfect Rationality	Bounded Rationality
1.	Problem formulation	An important and relevant organisational problem is identified	A visible problem that reflects the manager's interests and background is identified.
2.	Identification of decision criteria	All criteria are identified.	A limited set of criteria is identified.

3.	Allocation of weights to criteria	All criteria are evaluated and rated in terms of their importance to the organisation's goal.	A simple model is constructed to evaluate and rate the criteria; the decision maker's self-interest strongly influences the ratings.
4.	Development of alternatives	A comprehensive list of all alternatives is developed creatively.	A limited set of similar alternatives is identified.
5.	Analysis of alternatives	All alternatives are assessed against the decision criteria and weights; the consequences for each alternative are known.	Beginning with a favoured solution, alternatives are assessed, one at a time, against the decision criteria.
6.	Selection of an alternative	*Maximising decision:* the one with the highest economic outcome (in terms of the organisation's goal) is chosen.	*Satisficing decision:* the search continues until a solution is found that is satisfactory and sufficient, at which time the search stops.
7.	Implementation of alternative	Because the decision maximizes the chance of achieving a single, well-defined goal, all organisational members will embrace the solution.	Politics and power considerations will influence the acceptance of, and commitment to, the decision.
8.	Evaluation	The decision's outcome is objectively evaluated against the original problem.	Measurement of the decision's results are rarely so objective as to eliminate self-interests of the evaluator; possible escalation of resources to prior commitments despite both previous failures and strong evidence that allocation of additional resources is not warranted.

Source: Agnew, N.M. & Brown, J.L. (1986). "Bounded Rationality: Fallible Decisions in Unbounded Decision Space." *Behavioural Science Review*, July, pp. 148 – 161.

Table 1.5 summarises how the perfectly rational manager would proceed through the eight-step decision process. However, we already know that this perfectly rational model of decision making is not realistic with respect to managerial decision making. Instead, managers tend to operate under assumptions of bounded rationality (Agnew and Brown,

1986, Kaufman, 1990 and Skida, 1992). Look again at table 1.5 for description of how decisions are made under bounded rationality. In bounded rationality, managers construct simplified models that extract the essential features of problems without capturing all their complexity. Then, given information-processing limitations and constraints imposed by the organisation, managers attempt behave rationally within the parameters of the simple model. The result is a "satisficing" decision rather than a maximising one; that is, a decision in which the solution is satisfactory, or "good enough."

The implications of bounded rationality on the manager's job must not be overlooked. In situations in which the assumptions of perfect rationality do not apply (including most of the important and far-reaching decisions a manager makes), the details of the decision-making process are strongly influenced by the organisation's culture, internal politics, power considerations, and even by the decision maker's use of intuitive decision making.

Role of Intuition

What role does intuition play in managerial decision making? Managers regularly use their intuition, and it may actually help improve their decision making (Hammond, Hamm, Grassia and Pearson, 1987; Beiling and Eckel, 1991). What is intuitive decision making?

Intuition decision making is an unconscious process of making decisions based on experience and accumulated judgement. Making decisions on the basis of "gut feeling" does not necessarily happen independently of rational analysis; rather, the two complement each other. A manager who has had experience with a particular, or even similar, type of problem or situation often can act quickly with what appears to be limited information. Such a manager does not rely on a systematic and thorough analysis of the problem of identification and evaluation of alternatives but instead uses his or her experience and judgement to make a decision. How common is intuitive decision making? One survey of managers and other organisational employees revealed that almost one-third of them emphasised "gut feeling" over cognitive problem solving and decision making (Pospisil, 1997).

Whether managers use perfect rationality, bounded rationality, or intuition in making decisions, organisational reality is that they're likely to face different types of problem situations. What are the types of problem situations a manager might face in organisational decision-making?

4.0 CONCLUSION

Decision making is the selection of a course of action from among alternatives; it is the core of planning. Managers must make choices based on limited or bounded, rationality – that is, in the light of everything they can learn about a situation, which may not be everything they should know. Satisficing is a term sometimes used to describe picking a course of action that is satisfactory under the circumstances.

Decision making involves several steps such as identification of a problem, identification of decision criteria, allocation of weights to criteria, development of alternatives, analysis of alternatives, selection of an alternative, implementation of the alternative and evaluation of decision effectiveness.

Managerial decision making is assumed to be rational because it is consistent, value-maximising choices within specified constraints. Rational managerial decision making assumes that decisions are made in the best economic interests of the organisation. That is, the decision maker is assumed to be maximising the organisation's interests, not his or her own interests. In bounded rationality, managers construct simplified models that extract the essential features of problems without capturing all their complexity. Then, given information-processing limitations and constraints imposed by the organisation, managers attempt behave rationally within the parameters of the simple model. The result is a satisficing decision rather than a maximising one; that is, a decision in which the solution is satisfactory, or "good enough."

Managers regularly use their intuition, and it may actually help improve their decision making. By definition, intuition is an unconscious process of making decisions on the basis of experience and accumulated judgement. Making decisions on the basis of "gut feeling" does not necessarily happen independently of rational analysis; rather, the two complement each other. A manager who has had experience with a particular, or even similar, type of problem or situation often can act quickly with what appears to be limited information. Such a manager does not rely on a systematic and thorough analysis of the problem of identification and evaluation of alternatives but instead uses his or her experience and judgement to make a decision.

5.0 SUMMARY

In this unit, we have:

- defined decision making as a concept
- analysed decision making as a rational process

- stated the roles and limitations of rational decision making
- explained decision-making process
- stated the role of a manager as decision-maker.

6.0 TUTOR-MARKED ASSIGNMENT

i. "Decision making is the primary task of the manager". Discuss.
ii. Describe well-structured problems and programmed decisions.
iii. Describe ill-structured problems and non-programmed decisions.
iv. List the roles of a manager as a rational decision maker.
v. List the steps involved in decision making process. Briefly discuss each of them.

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UNIT 2 DECISION MAKING II

CONTENTS

1.0 INTRODUCTION

In the previous unit, we discussed the first segment of decision making, which included definition of the concept, its analysis as a rational process, the role and limitations of rational decision making, decision making process and the role of a manger as a decision-maker. In this unit, we shall continue with this discussion. We shall examine the types and problems and decisions, enumerate the decision-making conditions, highlight and discuss decision-making styles, state and explain the development of alternatives and limiting factors as well as creativity and innovation.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- list the types of problems and decisions
- enumerate the decision-making conditions
- highlight and discuss decision-making styles
- state and explain the development of alternatives and the limiting factor
- discuss creativity and innovation.

3.0 MAIN CONTENT

3.1 Types of Problems and Decisions

Managers will be faced with different types of problems and decisions as they do their jobs, that is, as they integrate and coordinate the work of others. Depending on the nature of the problem, the manager can use different types of decisions.

3.1.1 Well-Structured Problems and Programmed Decisions

Some problems are straightforward. The goal of the decision maker is clear, the problem is familiar, and information about the problem is easily defined and complete. Examples of these types of problems might include a customer's wanting to return a purchase to a retail store, a supplier's being late with an important delivery, a news team's responding to an unexpected and fast-breaking event. Such situations are called well-structured problems. For instance, a server in a restaurant spills a drink on a customer's coat. The restaurant manager has an aggrieved customer. What does the manager do? Because drinks are frequently spilled, there is probably that some standardised routine for handling the problem. For example, if the server was at fault, if the damage was significant, and if the customer asks for remedy, the manager will offer to have the coat cleaned at the restaurant's expense. In handling this problem situation, the manager uses a programmed decision.

Decisions are programmed to the extent that they are repetitive and routine and to the extent that a definite approach has been worked out for handling them. Because the problem is well structured, the manager does not have to take the trouble and expense of working up an involved decision process. Programmed decision making is relatively simple and tends to rely heavily on previous solutions. The "develop-the-alternatives" stage in the decision making process either doesn't exist or is given little attention. Why? Because once the structured problem is

defined, its solution is usually self-evident or at least reduced to very few alternatives that are familiar and that have proved successful in the past. In many cases, programmed decision making becomes decision making by precedent. Managers simply do what they and others previously have done in the same situation. The spilled drink on the customer's coat does not require the restaurant manager to identify and weight decision criteria or to develop a long list of possible solutions. Rather, the manager falls back on systematic procedure, rule or policy.

A procedure is a serious of interrelated sequential steps that a manager can use for responding to a structured problem. The only real difficulty is in identifying the problem. Once the problem is clear, so is the procedure. For instance, a purchasing manager receives a request from the sales department for 15 cellular phones for use by the company's sales representatives. The purchasing manager knows that there is a definite procedure for handling this decision. The decision making process in this case is merely executing a simple series of sequential steps. Information technology is being used to further simplify the development or organisational procedures. Some powerful new software programmes are being designed that automate routine and complex procedures. For example, at Hewlett-Packard, a comprehensive programme has automated a quarterly wage –review process of more than 13,000 salespeople.

A rule is an explicit statement that tells a manager what he or she ought to or ought not to do. Rules are frequently used by managers when they confront a well-structured problem because they are simple to follow and ensure consistency. For example, rules about lateness and absenteeism permit supervisors to make disciplinary decisions rapidly and with a relatively high degree of fairness.

A third guide for making programmed decisions is a policy. It provides guidelines to channel a manager's thinking in a specific direction. In contrast to a rule, a policy establishes parameters for the decision maker rather than specifically stating what should or should not be done. Policies typically contain an ambiguous term that leaves interpretation up to the decision maker. For instance, each of the following is a policy statement:

1. The customer always comes first and should always be *satisfied*.
2. We promote from within, *whenever possible*.
3. Employee wages shall be *competitive* for the community in which our plants are located.

Note that "satisfied," "whenever possible" and competitive" are terms that require interpretation. The policy to pay competitive wages does

not tell a given plant's human resources manager the exact amount he or she should pay, but it does give direction to the decision he or she makes.

For instance, members of staff of a particular institution were directed to travel for a programme, which was cancelled at the very last minute. The arrangement was that the event would take two nights for some staff and three nights for others, and that all staff be paid their Duty Tour Allowance (DTA) for the number of days spent outside their duty station. However, following the cancellation of the event, the staff had to return to their offices. The bursary official will use his discretion in compensating staff to reduce costs by demanding for their air ticket or bus ticket (as evidence of travel). There were staff who had paid for air tickets but could not travel before the event was cancelled, such people would be treated differently. The decisions taken now to solve this problem would become a precedent on which to solve similar problems in future.

3.1.2 Ill-Structured Problems and Non-Programmed Decisions

As you can well see, not all problems managers face are well-structured and solvable by a programmed decision. Many organisational situations involved ill-structured problems, which are problems that are new or unusual. Information about such problems is ambiguous or incomplete. For example, the selection of an architect to design a new corporate headquarters building is one example of an ill-structured problem. So too is the problem of whether to invest in a new, unproven technology or whether to shut down a money-losing division.

When problems are ill-structured, managers must rely on non-programmed decision making to develop unique solutions. Non-programmed decisions are unique and non-recurring. When a manager confronts an ill-structured problem, or one that is unique, there is no cut-and-dried solution. It requires a custom-made response through non-programmed decision making.

3.1.3 Integration

Figure 5.4 describes the relationship among the types of problems, the types of decisions, and organisational level. Whereas well-structured problems are resolved with programmed decision making, ill-structured problems require non-programmed decision making. Because lower-level managers confront familiar and repetitive problems, they most typically rely on programmed decisions such as standard operating procedures, rules and organisational policies. The problems confronting managers are likely to become more ill-structured as they move up the

organisational hierarchy. This is because lower-level managers handle the routine decisions themselves and send up the chain of command only decisions that they find unusual or difficult. Similarly, higher-level managers pass along routine decisions to their subordinates so that they can deal with more difficult issues.

It must be borne in mind however that few managerial decisions in the real world are either fully programmed or non-programmed. These are extremes, and most decisions fall somewhere in between. Few programme decisions are designed to eliminate individual judgement completely. At the other extreme, even a unique situation requiring a non-programme decision can be helped by programmed routines. It is best to think of decisions as mainly programmed or mainly non-programmed, rather than as completely one or the other.

A final point on this topic is that organisational efficiency is facilitated by the use of programmed decision making, which may explain its wide popularity. Whenever possible, management decisions are likely to be programmed. Obviously, using a programmed decision is not too realistic at the top level of the organisation because most of the problems that top managers confront are of a non-recurring nature. However, there are strong economic incentives for top managers to create standard operating procedures (SOPs), rules, and policies to guide other managers.

Programmed decisions minimise the need for managers to exercise discretion. This fact is relevant because discretion can cost money. The more non-programmed decision making a manager is required to do, the greater the judgement needed. Because sound judgement is an uncommon quality, it costs more to acquire the services of managers who possess it.

Some organisations try to economise by hiring less-skilled managers but do not develop programmed decision guides for them to follow. Take for example, a small women's clothing store chain whose owner, because he chooses to pay low salaries, hires store managers with little experience and limited ability to make good judgements. This practice, by itself, might not be a problem. The trouble is that the owner provides neither training nor explicit rules nor procedures to guide his store manager's decisions. The result is constant complaints by customers about such things as promotional discounts, processing credit sales, and the handling of returns.

One of the more challenging tasks facing managers as they make decisions – programmed or non-programmed – is analysing decision alternatives.

3.2 Decision Making Conditions

There are three conditions that managers may face as they make decisions: certainty, risk and uncertainty. What are the characteristics of each of these decision-making conditions?

3.2.1 Certainty

The ideal situation for making decisions is one of certainty; that is, the manager is able to make perfectly accurate decisions because the outcome of every alternative is known. For example, when a member of staff of NOUN travels on official errand and stays outside his duty station for the night, the duty travel allowance (DTA) he or she is entitled to is known, he cannot be offered anything less. When the NOUN Cooperative Society decides which bank to deposit excess funds, they know exactly how much interest is being offered by each bank and will be earned on the funds. The officials of NOUN Cooperative Society are certain about the outcomes of each alternative. As you might expect, this condition is not characteristic of the situations in which most managerial decisions are made. It is more idealistic than realistic.

3.2.2 Risk

A far more common situation is one of risk. By risk, we mean those conditions in which the decision maker is able to estimate the likelihood of certain alternatives or outcomes. This ability to assign probabilities to outcomes may be the result of personal experience or secondary information. Under the conditions of risk, the manager has historical data that allow him or her to assign probabilities to different alternatives. Let us work with an example.

Suppose the management of NOUN is considering requesting the management of Wema Bank Plc. to open a cash centre and install Automated Teller Machines (ATM) centres within the Headquarters. This decision will be significantly influenced by the reduction of man-hour loss to be recorded especially during payday when all staff would leave their duty posts en-mass to go to Marina or Idowu Taylor branches of that bank for the purpose of withdrawing salaries from their bank accounts. It will also significantly reduce the risk of accident, armed robbery attack or loss of money in the cab or bus. There would be higher productivity from members of staff which cannot be quantified in monetary terms. All the above alternatives, when combined, would be more beneficial to the university in general and members of staff in particular.

You can create an expected value formulation; that is, you can compute the conditional return from each possible outcome by multiplying the number decisions which would be taken at work by the probabilities of armed robbery, accident and so on incidents which would be averted as a result of opening a cash centre and ATM centre in the Headquarters to Marina or Idowu Taylor Branches of Wema Bank to withdraw salaries.

3.2.3 Uncertainty

What happens if you have to make a decision when you are not certain about the outcomes and cannot even make reasonable probability estimates? We call such a condition uncertainty. Many decision-making situations managers face are ones of uncertainty. Under conditions of uncertainty, the choice of alternative is influenced by the limited amount of information available to the decision maker.

Another factor that influences choice under conditions of uncertainty is the psychological orientation of the decision maker. The optimistic manager will follow a "maximax" choice (maximising the maximum payoff), the pessimist will pursue a "maximin" choice (maximising the minimum possible payoff), and the manager who desires to minimise his maximum "regret" will opt for a minimised choice.

3.3 Decision-Making Styles

Suppose you were a new manager at the Gillette Company or at the local YMCA. How would you tackle problems that arise and that require decisions making? Managers have different styles when it comes to making decisions and solving problems. One view of decision-making styles proposes that there are three ways managers approach problems in the workplace; they are either problem avoiders, problem solvers, or problem seekers (Schemerhorn, 1993). What are the characteristics of each approach?

A problem avoider ignores information that points to a problem. Avoiders are inactive and do not want to confront problems. A problem solver tries to solve problems when they come up. Solvers are reactive; they deal with problems after they occur. Problem seekers actively seek for problems to solve or new opportunities to pursue. They take proactive approach by anticipating problems. Managers can and do use all these three approaches. For example, there are times when avoiding a problem is the best response. At other times, being reactive is the only option because the problem happens so quickly. And innovative, creative organisations need managers who proactively seek opportunities and ways to do things better.

Another perspective on decision-making styles proposes that people differ along two dimensions in the way they approach decision making (Rowe, Boulgarides and McGrath (1984). The first is an individual's way of thinking. Some of us tend to be rational and logical in the way we think or process information. A rational type looks at information in order and makes sure that it is logical and consistent before making a decision. Some of us tend to be creative and intuitive. Intuitive types do not have to process information in a certain order but are comfortable looking at it as a whole.

The other dimension describes an individual's tolerance for ambiguity. Again, some of us have a low tolerance for ambiguity and must have consistency and order in the way we structure information so that ambiguity is minimised. On the other hand, some of us can tolerate high levels of ambiguity and are able to process many thoughts at the same time. When we diagram these two dimensions, four decision-making styles are formed: directive, analytic, conceptual and behavioural (figure 5.4). Let us look more closely at each style.

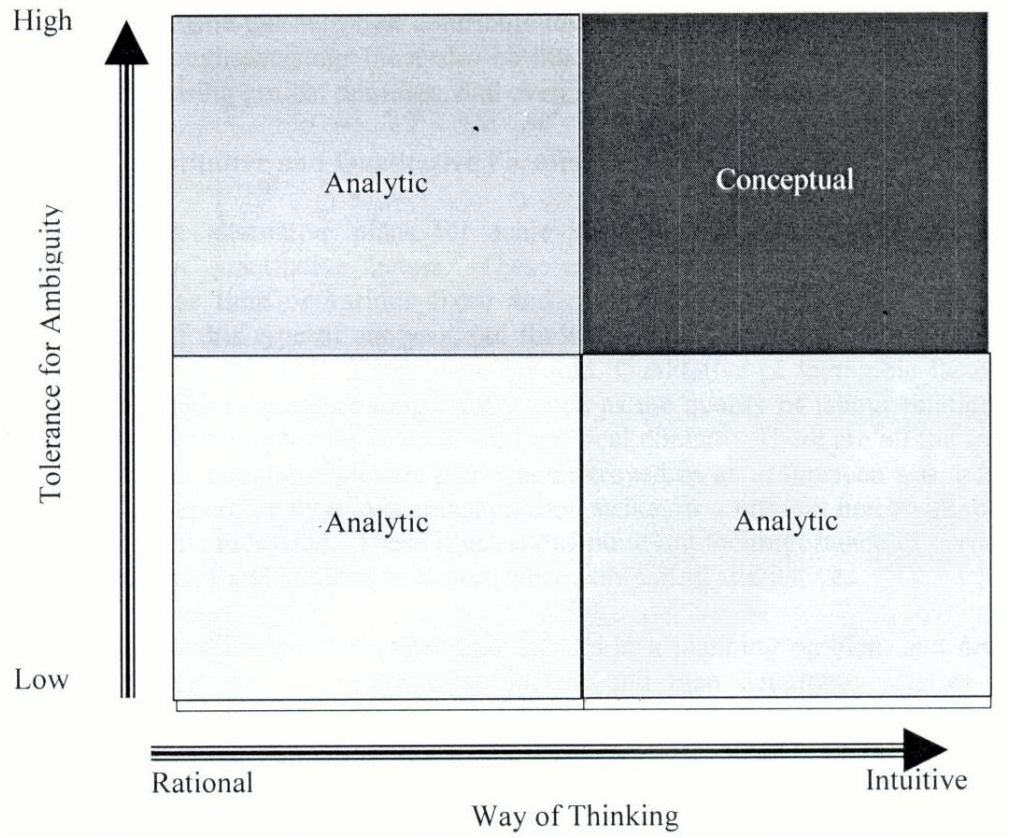

Fig. 2.1: Decision-Making Styles

Source: Robbins, S.P. & De Cenzo, D.A. (1998). *Supervisory Today*. (2nd ed.). Upper Saddle River, NJ: Prentice Hall.

3.4 Development of Alternatives and the Limiting Factor

Assuming that we know what our goals are and agree on clear planning premises, the first step of decision making is to develop alternatives. There are almost always alternatives to any course of action; indeed, if there seems to be only one way of doing a thing, that way is probably wrong. If we can think of only one course of action, clearly, we have not thought hard enough. The ability to develop alternatives is often as important as being able to select correctly from among them. On the other hand, ingenuity, research and common sense will often unearth so many choices that none of them can be adequately evaluated. The manager needs help in this situation, and this help, as well as assistance in choosing the best alternative, is found in the concept of the limiting or strategic factor.

A limiting factor is something that stands in the way of accomplishing a desired objective. Recognising the limiting factors in a given situation makes it possible to narrow the search for alternatives to those that will overcome the limiting factors. The principle of the limiting factor states that, by recognising and overcoming those factors that stand critically in the way of a goal, the best alternative course of action can be selected.

Once appropriate alternatives have been found, the next step in planning is to evaluate them and select the one that will best contribute to the goal. This is the point of ultimate decision making, although decisions must also be made in the other steps of planning – in selecting goals, in choosing critical premises, and even in selecting alternatives.

3.4.1 Quantitative and Qualitative Factors

In comparing alternative plans for achieving an objective, people are likely to think exclusively of quantitative factors. These are factors that can be measured in numerical terms, such as time or various fixed and operating costs. No one would question the importance of this type of analysis, but the success of the venture would be endangered if intangible, or qualitative, factors were ignored. Qualitative or intangible factors are factors that are difficult to measure numerically, such as the quality of labour relations, the risk of technological change, or the international political climate. There are all too many instances in which an excellent quantitative plan was destroyed by an unforeseen war, a fine marketing plan made inoperable by a long transportation strike, or a rational borrowing plan hampered by an economic recession. These illustrations point out the importance of giving attention to both quantitative and qualitative factors when comparing alternatives.

To evaluate and compare the intangible factors in a planning problem and make decisions, managers must first recognise these factors and then determine whether a reasonable quantitative measurement can be given to them. If not, they should find out as much as possible about the factors, perhaps rate them in terms of their importance, compare their probable influence on the outcome with that of the quantitative factors, and then come to a decision. This decision may give predominant weight to a single intangible.

3.4.2 Marginal Analysis

Evaluating alternatives may involve utilising the technique of marginal analysis to compare the additional revenue and the additional cost arising from increasing output. Where the objective is to maximise profit, this goal will be reached, as elementary economics teaches, when the additional revenue and additional cost are equal. In other words, if the additional revenue of a larger quantity is greater than its additional cost, more profit can be made by producing more. However, if the additional revenue of the larger quantity is less than its additional cost, a larger profit can be made by producing less.

Marginal analysis can be used in comparing factors other than cost and revenue. For example, to find the best output of a machine, input could be varied against output until the additional input equals the additional output. This would then be the point of maximum efficiency of the machine. Or the number of subordinates reporting to a manager might conceivably be increased to the point at which additional cost savings, better communication and morale, and other factors equal additional losses in the effectiveness of control, leadership, and similar factors.

3.4.3 Cost-Effective Analysis

An improvement on, or variation of, traditional marginal analysis is cost-effectiveness, or cost-benefit analysis. Cost-effectiveness analysis seeks the best ratio of benefit and cost; this means, for example, finding the least costly way of reaching an objective or getting the greatest value for a given expenditure.

3.4.4 Selecting an Alternative: Three Approaches

When selecting from among alternatives, managers can use three basic approaches: (1) experience, (2) experimentation, and (3) research and analysis (see figure 7.1 below for illustration).

(a) Experience

Reliance on past experience probably plays a larger part than it deserves in decision making. Experienced managers usually believe, often without realising it, that the things they have successfully accomplished and the mistakes they have made furnish almost infallible guides to the future. This attitude is likely to be more pronounced the more experience a manager has had and the higher he or she has risen in an organisation.

To some extent, experience is the best teacher. The very fact that managers have reached their position appears to justify their past decisions. Moreover, the process of thinking problems through, making decisions, and seeing programmes succeed or fail does make for a degree of good and judgement (at times bordering on intuition). Many people, however, do not learn from their errors, and there are managers who seem never to gain the seasoned judgement required by the modern enterprise.

Relying on past experience as a guide for future action can be dangerous. In the first place, most people do not recognise the underlying reasons for their mistakes or failures. In the second place, the lessons of experience may be entirely inapplicable to new problems. Good decisions must be evaluated against future events, while experience belongs to the past.

On the other hand, if a person carefully analyses experience, rather than blindly following it, and if he or she distills from experience the fundamental reasons for success or failure, then experience can be useful as a basis for decision analysis. A successful programme, a well-managed company, a profitable product promotion, or any other decision that turns out well may furnish useful data for such distillation. Just as scientists do not hesitate to build upon the research of others and would be foolish indeed merely to duplicate it, managers can learn much from others.

(b) Experimentation

An obvious way to decide among alternatives is to try one of them and see what happens. Experimentation is often used in scientific inquiry. People often argue that it should be employed more often in managing and that the only way a manager can make sure some plans are right – especially in view of the intangible factors – is to try the various alternatives and see which is best.

The experimental technique is likely to be the most expensive of all techniques, especially if a programme requires heavy expenditure of capital and personnel and if the firm cannot afford to vigorously attempt several alternatives. Besides, after an experiment has been tried, there may still be doubt about what it proved, since the future may not duplicate the present. This technique, therefore, should be used only after considering other alternatives.

On the other hand, there are many decisions that cannot be made until the best course of action can be ascertained by experiment. Even reflections on experience or the most careful research may not assure managers of correct decisions. This is nowhere better illustrated than in the planning of a new airplane.

For instance, an airplane manufacturer may draw from personal experience and that of other plan manufacturers and new plane users. Engineers and economists many make expensive studies of stress, vibration, fuel consumption, speed, space allocation, and other factors. However, all these studies do not answer every question about the flight characteristics and economics of a successful plane; therefore, some experimentation is almost always involved in the process of selecting the right course to follow. Ordinarily, a first-production or prototype, airplane is constructed and tested; and on the basis of these tests, production of airplanes is made according to a somewhat revised design. Experimentation is used in other ways. A firm may test a new product in certain market before expanding its sale nationwide. Organisational techniques are often tried in a branch office or plant before being applied over an entire company. A candidate for a management job may be tested in the job during the incumbent's vacation.

(c) Research and Analysis

One of the most effective techniques for selecting from alternatives when major decisions are involved is research and analysis. This approach means solving a problem by first comprehending it. It thus involves a search for relationships among the more critical of the variables, constraints, and premises that bear upon the goal sought. It is the pencil-and-paper (or, better, the computer-and-printout) approach to decision making.

Solving a planning problem requires breaking it into its component parts and studying the various quantitative and qualitative factors. Study and analysis is likely to be far cheaper than experimentation. The hours of time and reams of paper used for analyses usually cost much less than trying the various alternatives. In manufacturing airplanes, for example,

if careful research did not precede the building and testing of the prototype airplane and its parts, the resulting costs would be enormous.

A major step in the research-and-analysis approach is to develop a model simulating the problem. Thus, architects often make models of buildings in the form of extensive blueprints or three-dimensional renditions. Engineers test models of airplane wings and missiles in a wind tunnel. But the most useful simulation is likely to be a representation of the variables in a problem situation by mathematical terms and relationships. Conceptualising a problem is a major step toward its solution. The physical sciences have long relied on mathematical models to do this, and it is encouraging to see this method being applied to managerial decision making.

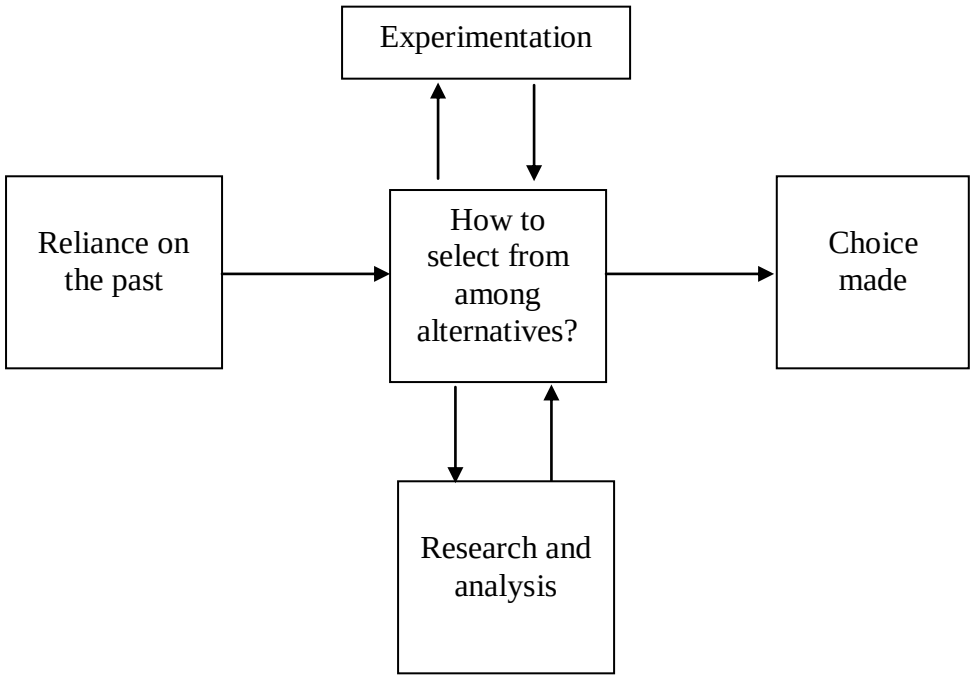

Fig. 2.2: Bases for Selecting from among Alternative Courses of Action

Source: Weihrich, H. & Koontz, H. (2005). *Management: A Global Perspective* (11th ed.). Asia: Mc-Graw Hill Education.

3.5 Creativity and Innovation

An important factor in managing people is creativity. A distinction can be made between creativity and innovation. The term "creativity" usually refers to the ability and power to develop new ideas (Weihrich & Koontz, 2005). Innovation, on the other hand, usually means the use of

these ideas. In an organisation, this can mean a new product, a new service, or a new way of doing things. Although this discussion centres on the creative process, it is implied that organisations not only generate new ideas but also translate them into practical applications.

3.5.1 The Creative Process

The creative process is seldom simple and linear. Generally, it consists of four overlapping and interacting phases, namely:

(1) unconscious scanning;
(2) intuition;
(3) insight; and
(4) logical formulation.

The first phase, unconscious scanning, is difficult to explain because it is beyond consciousness. This scanning usually requires an absorption in the problem, which may be vague in the mind. Yet managers working under time constraints often make decisions prematurely rather than dealing thoroughly with ambiguous, ill-defined problems.

The second phase, intuition, connects the unconscious with the conscious. This stage may involve a combination of factors that may seem contradictory at first. For example, Donaldson Brown and Alfred Sloan of General Motors conceived the idea of a decentralised division structure with centralised control, concepts that seem to contradict each other (Osborn, 1963). Yet the idea makes sense when one recognises the underlying principles of:

(1) giving responsibility for the operations to the general manager of each division; and
(2) maintaining centralised control in headquarters over certain functions.

It took intuition of two great corporate leaders to see that these two principles could interact in the managerial process.

Intuition needs time to work. It requires that people find new combinations and integrate diverse concepts and ideas. Thus, one must think through the problem. Intuitive thinking is promoted by several techniques, such as brainstorming.

Insight, the third phase of the creative process, is mostly the result of hard work. For example, many ideas are needed in the development of a usable product, a new course material or textbook, a new service, or a new process. Interestingly, insight may come at times when the

thoughts are not directly focused on the problem at hand. Moreover, new insights may last for only a few minutes, and effective managers may benefit from having paper and pencil ready to make notes of their creative ideas.

The last phase in the creative process is logical formulation or verification. Insight needs to be tested through logic or experiment. This may be accomplished by continuing work on an idea or by inviting critiques from others. Brown and Sloan's idea of decentralisation, for example, needed to be tested against organisational reality.

3.5.2 Brainstorming

Creativity can be taught. Creative thoughts are often the fruits of extensive efforts. Some techniques focus on group interactions, others on individual actions. One of the best known techniques for facilitating creativity was developed by Alex F. Osborn, who has been called the father of brainstorming (Osborn, 1963). The purpose of this approach is to improve problem solving by new and unusual solutions. In the brainstorming session, a multiplication of ideas is sought. The rules are as follows.

- No ideas are ever criticised.
- The more radical the ideas are the better.
- The quantity of idea production is stressed.
- The improvement of ideas by others is encouraged.

Brainstorming, which emphasises group thinking, was widely accepted after its introduction. However, the enthusiasm was dampened by research, which showed that individuals could develop better ideas working by themselves than they could while working in groups. Additional research, however, showed that in some situations the group approach may work well. This may be the case when the information is distributed among various people or when a poorer group decision is more acceptable than a better individual decision that, for example, may be opposed by those who have to implement it. Also, the acceptance of new ideas is usually greater when the decision is made by the group charged with its implementation.

3.5.3 Limitations of Traditional Group Discussion

Although the technique of brainstorming may result in creative ideas, it would be incorrect to assume that creativity flourishes only in groups. Indeed, the usual group discussion can inhibit creativity. For example, group members may pursue an idea to the exclusion of other alternatives. Experts on a topic may not be willing to express their ideas

in a group for fear of being ridiculed. Also, lower-level managers may be inhibited in expressing their views in a group with higher-level managers. Pressures to conform can discourage the expression of deviant opinions. The need for getting along with others can be stronger than the need for exploring creative but unpopular alternatives to the solution of a problem. Finally, because they need to arrive at a decision, groups may not make the effort of searching for data relevant to a decision.

3.5.4 The Creative Manager

All too often, it is assumed that most people are non-creative and have little ability to develop new ideas. This assumption, unfortunately, can be detrimental to the organisation, for in the appropriate environment virtually all people are capable of being creative, although the degree of creativity varies considerably between individuals.

Generally speaking, creative people are inquisitive and come up with new and unusual ideas; they are seldom satisfied with the status quo. Although intelligent, creative people not only rely on the rational process but also involve the emotional aspects of their personality in problem solving. They appear to be excited about solving a problem, even to the point of tenacity. Creative individuals are aware of themselves and capable of independent judgement. They object to conformity and see themselves as being different.

It is beyond question that creative people can make great contributions to an enterprise. At the same time, however, they may also cause difficulties in organisations. Change – as any manager knows – is not always popular. Moreover, change frequently has undesirable and unexpected side effects. Similarly, unusual ideas, pursued stubbornly, may frustrate others and inhibit the smooth functioning of an organisation. Finally, creative individuals may be disruptive by ignoring established policies, rules, and regulations.

As a result, the creativity of most individuals is probably underutilized in many cases, despite the fact that unusual innovations can be of great benefit to the firm. However, individual and group techniques can be effectively used to nurture creativity, especially in the area of planning. Nonetheless, creativity is not a substitute for managerial judgement. It is the manager who must determine and weigh the risks involved in pursuing unusual ideas and translating them into innovative practices.

4.0 CONCLUSION

Virtually all decisions are made in an environment of at least some uncertainty involving the interaction of a number of important variables, and there are certain risks involved in making decisions. Managers dealing with uncertainty should know the degree and nature of the risk they are taking in choosing a course of action.

Creativity, the ability and power to develop new ideas, is important for effective managing. Innovation is the use of these ideas. The creative process consists of four overlapping phases: unconscious scanning, intuition, insight and logical formulation. A popular technique for enhancing creativity is brainstorming. Creative individuals can make a great contribution to the enterprise. At the same time, they can be disruptive by not following commonly accepted rules of behaviour.

Three conditions that managers may face as they make decisions are certainty, risk and uncertainty. The ideal situation for making decisions is one of certainty where the manager is able to make perfectly accurate decisions because the outcome of every alternative is already known. However, in the situation of risk, the manager has historical data that allow him or her to assignment probabilities to different alternatives. The ability to assign probabilities to outcomes may be the result of personal experience or secondary information. Under conditions of uncertainty the choice of alternative is influenced by the limited amount of information available to the decision maker.

One view of decision making styles proposes that there are three ways managers approach problems in the workplace; there are problem avoiders, problem solvers, or problem seekers. Each of these groups has its peculiar characteristics. Another perspective on decision-making styles proposes that people differ along two dimensions in the way they approach decision making. The first is an individual's way of thinking and the second is the individual's tolerance for ambiguity.

The ability to develop alternatives is often as important as being able to select correctly from among them. A limiting factor is something that however stands in the way of accomplishing a desired objective and recognising this limiting factor makes it possible to narrow the search for alternatives to those that will overcome the limiting factors. Evaluating and selecting the best alternative that will contribute to the goal completes this process. Following are some of the steps of selecting the best alternative: quantitative and qualitative factors, marginal analysis, cost effective analysis, use the approach of experience, experimentation and research and analysis in selecting the best option.

Creativity and innovation is another important factor in managing people. Whereas creativity refers to the ability and power to develop new ideas, innovation usually means the use of these ideas.

5.0 SUMMARY

In this unit, we have:

- listed the types of problems and decisions
- enumerated the decision-making conditions
- highlighted and discussed decision-making styles
- stated and explained the development of alternatives and the limiting factor
- discussed creativity and innovation.

6.0 TUTOR-MARKED ASSIGNMENT

i. Search the internet for creativity and illustrate how creativity can be applied to decision making.
ii. What do you understand by the concept brainstorming? Find three applications of brainstorming on the internet.
iii. Why is experience often referred to not only as an expensive basis for decision making but also as a dangerous one? How can a manager make the best use of experience?
iv. In a decision problem you now know of, how and where would you apply the principle of the limiting factor?
v. Think of a problem that was creatively solved. Did the solution come from group discussion, or was it the result of an individual effort? Reconstruct the phases of the creative process.
vi. What are the characteristics of decision making under the condition of certainty?
vii. Describe the characteristics of decision making under the condition or risk.
viii. How might a manager deal with making decisions under conditions of uncertainty?

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UNIT 3 MANAGEMENT BY OBJECTIVES (MBO)

CONTENTS

1.0 INTRODUCTION

In the last two units, we examined decision making as a concept, analysed decision making as a rational process, stated the roles and limitations of rational decision making, explained decision-making process, stated the role of a manager as decision-maker, listed the types of problems and decisions, enumerated the decision-making conditions, highlighted and discuss decision-making styles, and stated as well as explained the development of alternatives and the limiting factor as well as creativity and innovation.

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In this unit, we shall discuss another interesting topic, management by objectives, its evolution, the benefits and weaknesses of this concept.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- define the concept management by objectives
- discuss how management by objectives (MBO) had evolved
- enumerate and discuss the benefits and weaknesses of management by objectives.

3.0 MAIN CONTENT

3.1 Definition of the Concept MBO

Weihrich and Koontz (2005) define MBO as a comprehensive managerial system that integrates many key managerial activities in a systematic manner and is consciously directed toward the effective and efficient achievement of organisational and individual objectives.

Robbins and Coulter (1999) define MBO as a management system in which specific performance objectives are jointly determined by subordinates and their superiors, progress toward objectives is periodically reviewed, and rewards are allocated on the basis of this progress. Rather than using goal as controls, MBO uses them to motivate employees as well.

3.2 Evolving Concepts in Management by Objectives

Instead of traditional objective setting, many organisations use management by objectives. Management by objectives (MBO) is also now practiced around the world. Despite its wide application, it is not always clear what is meant by MBO. Some still think of it as an appraisal tool; others see it as a motivational technique, still others consider MBO a planning and control device. In other words, definitions and applications of MBO differ widely.

This view of MBO as a system of managing is not shared by all. While some still define MBO in a very narrow, limited way, it should be seen as a comprehensive goal-driven, success-oriented management system as shown in Figure 3.1. Besides being used for performance appraisal, as an instrument for motivating individuals, and in strategic planning, there are still other managerial subsystems that can be integrated into the MBO process. They include human resource planning and development (staff as well as individual and organisation development), career planning (building on personal strengths and overcoming weaknesses), the reward system (paying for performance), budgeting (planning and controlling), and other managerial activities important for a specific position. These various managerial activities need to be integrated into a system. In short, to be effective, MBO must be considered a way of managing and not an addition to the managerial job (Weihrich, 1973 and 2000). Management by objectives was first described by Peter Drucker as consisting of four elements: goal specificity, participative decision making, an explicit time period, and performance objectives for organisational units and individual members.

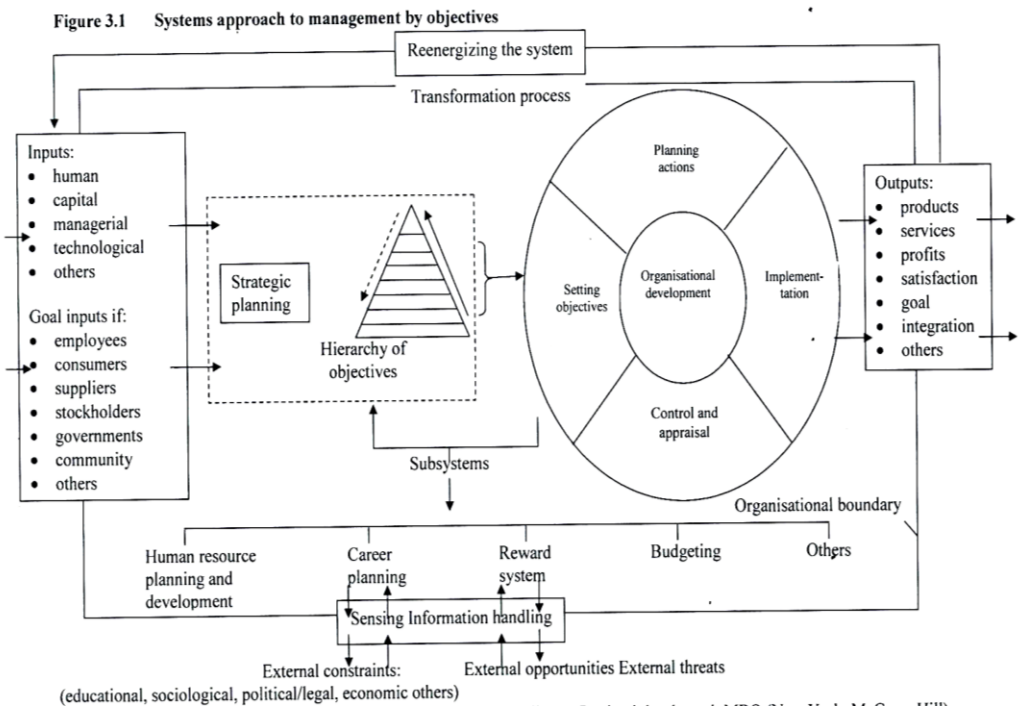

Fig. 3.1: Systems Approach to Management by Objectives

Source: Adapted from Weihrich, H. (1985). *Management Excellence: Productivity through MBO*. New York: McGraw-Hill.

3.3 Benefits and Weaknesses of Management by Objectives

Although goal-oriented management is now one of the most widely practiced managerial approaches, its effectiveness is sometimes questioned. Faulty implementation is often blamed, but another reason is that MBO may be applied as a mechanistic technique focusing on selected aspects of the managerial process without integrating them into a system. There is considerable evidence, much of it from laboratory studies, that shows the motivational aspects of clear goals. But there are other benefits such as listed below.

- Improvement of managing through results-oriented planning.
- Clarification of organisational roles and structures as well as delegation of authority according to the results expected of the people occupying the roles.
- Encouragement of commitment to personal and organisational goals.

- Development of effective controls that measure results and lead to corrective actions.

3.4 Drawbacks of MBO

Despite all its advantages, an MBO system has a number of weaknesses. Most are due to shortcomings in applying the MBO concepts. Failure to teach the philosophy of MBO is one of the weaknesses of certain programmes. Managers must explain to subordinates what it is, how it works, why it is being done, what part it will play in appraising performance, and, above all, how participants can benefit. The philosophy is built on the concepts of self-control and self-direction.

Failure to give guidelines to goal setters is often another problem. Managers must know what the corporate goals are and how their own activities fit in with them. Managers also need planning premises and knowledge of major company policies.

There is also the difficulty of setting verifiable goals with the right degree of flexibility. Participants in MBO programmes report at times that the excessive concern with economic results puts pressure on individuals that may encourage questionable behaviour. To reduce the probability of resorting to unethical means to achieve results, top management must agree to reasonable objectives, clearly state behavioural expectations, and give priority to ethical behaviour, rewarding it as well as punishing unethical activities.

In addition, emphasis on short-run goals can be done at the expense of the longer-range health of the organisation. Moreover, the danger of inflexibility can make managers hesitate to change objectives, even if a changed environment would require such adjustments.

Other dangers include the overuse of quantitative goals and the attempt to use numbers in areas where they are not applicable, or they may downgrade important goals that are difficult to state in terms of end results. For example, a favourable company image may be the key strength of an enterprise, yet stating this in quantitative terms is difficult. There is also the danger of forgetting that managing involves more than goal setting.

But even with the difficulties and dangers of managing by objectives in certain situations, this system emphasises in practice the setting of goals long known to be an essential part of planning and managing.

4.0 CONCLUSION

Management by objectives (MBO) has been accepted in recent times as a vital tool for management appraisal and this planning and control tool has received wider acceptability by business and corporate organisations within Nigeria and around the globe. It is defined as a comprehensive managerial system that integrates many key managerial activities in a systematic manner and is consciously directed toward the effective and efficient achievement of organisational and individual objectives.

Four elements of MBO have been identified, they include: goal specificity, participative decision making, an explicit time period, and performance objectives for organisational units and individual members.

The benefits of MBO are that it improves managing through results-oriented planning, clarify organisational roles and structures as well as delegation of authority according to the results expected of the people occupying the roles, encourage commitment to personal and organisational goals and develop effective control that measure results and lead to corrective actions. The limitations or drawbacks are: failure to teach the philosophy, failure to give guidelines to goal setters, difficulty in setting verifiable goals with the right degree of flexibility, emphasis on short run goals can be done at the expense of the longer range health of the organisation, overuse of quantitative goals and the attempt to use numbers in areas where they are not applicable.

5.0 SUMMARY

In this unit, we have:

- defined the concept management by objectives
- discussed how management by objectives (MBO) had evolved
- enumerate and discuss the benefits and weaknesses of management by objectives.

6.0 TUTOR-MARKED ASSIGNMENT

i. What do you understand by the term Management by Objectives (MBO)?
ii. What are the steps in a typical MBO programme? Management by Objectives

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UNIT 4 PREMISING AND FORECASTING

CONTENTS

1.0 INTRODUCTION

In the last unit, we defined the concept management by objectives, discussed how management by objectives (MBO) had evolved, enumerated and discuss the benefits and weaknesses of management by objectives.

One of the essential and often overlooked steps in effective and coordinated planning is premising, which is the establishment of and the agreement by managers and planners to utilise consistent assumptions critical to plans under consideration.

In this unit, we shall examine forecasting, various forecasting techniques, a distinction between premising and forecasting and how forecasting can be made effective as a critical tool for planning.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- define forecasting and premising
- define benchmarking
- enumerate and explain the various types of forecasting

- differentiate between forecasting and premising
- explain what is meant by environmental forecasting
- list ways by which forecasting can be made effective.

3.0 MAIN CONTENT

3.1 Definition of the Concepts: Forecasting and Premising

These concepts will be defined under the following sub-topics.

Forecasting

Environmental scanning creates the foundation for forecasts. Information obtained through scanning is used to develop scenarios. These, in turn, establish premises for forecasts. Forecast, according to Robbins and Coulter (1999) is defined as predictions of future outcomes. Similarly, Hornby (2006) sees forecast as a statement about what will happen in future based on information that is available now.

Premising

Planning premises are defined as the anticipated environment in which plans are expected to operate. They include assumptions or forecasts of the future and known conditions that will affect the operation of plans (Drucker, 2001). Examples are prevailing policies and existing company plans that control the basic nature of supporting plans.

3.2 Differences between Forecasting and Planning Premise

A distinction should be drawn between forecasts that are planning premises and forecasts that are translated into future expectancies, usually in financial terms, from actual plans developed. For example, a forecast to determine future business conditions, sales volume, or political environment furnishes premises on which to develop plans. However, forecast of the costs or revenues from a new capital investment translates a planning programme into future expectations. In the first case, the forecast is a prerequisite for planning; in the second case however, the forecast is a result of planning.

At the same time, plans themselves and forecasts of their future effects often become premises for other plans. The decision by an electricity company to construct a nuclear generating plant, for example, creates conditions that give rise to premises for transmission line plans and other plans necessarily dependent on the generating plant being built.

3.3 Environmental Forecasting

If the future could be forecasted with accuracy, planning would be relatively simple. Managers would need only to take into account their human and material resources and their opportunities and threats, compute the optimum method of reaching their objective, and proceed with a relatively high degree of certainty towards it. In practice, however, forecasting is much more complicated.

3.3.1 Values and Areas of Forecasting

Forecasting has values aside from its use. First, forecasting and their review by managers necessitate thinking ahead, looking to the future and preparing for it. Second, preparation of the forecast may disclose areas where necessary control is lacking. Third, forecasting, especially when there is participation throughout the organisation, helps unify and coordinate plans. By focusing attention on the future, it assists in bringing a singleness of purpose to planning.

The environmental areas that are frequently chosen for making forecasts include the economic, social, political/legal, and technological environments.

3.3.2 Forecasting with the Delphi Technique

One of the attempts to make technological forecasting more accurate and meaningful is the Delphi technique. This technique, developed by Olaf Helmer and his colleagues at the RAND Corporation, has a degree of scientific respectability and acceptance. A typical process of the Delphi technique is as follows.

1. A panel of experts on a particular problem area is selected, usually from both inside and outside the organisation.
2. The experts are asked to make anonymously (so that they will not be influenced by others) a forecast as to what they think will happen and when, in various areas of new discoveries or developments.
3. The answers are compiled, and the composite results are fed back to the panel members.
4. With this information at hand (but still with individual anonymity), further estimates of the future are made.
5. This process may be repeated several times.
6. When a convergence of opinion begins to evolve, the results are then used as an acceptable forecast.

It should be noted that the purpose of the successive opinions and feedback is not to force the experts to compromise but rather, by bringing additional informational inputs to bear, to make opinions more informed. It is thus hoped, and experience has verified this hope, that an informed consensus among experts will be arrived at.

3.4 Types of Forecasts

Two specific outcomes managers attempt to forecast are future revenues and new technological breakthroughs.

3.4.1 Revenues Forecast

However, virtually any component in the organisation's general and specific environment can be forecasted. Quaker Oats' Company projected sales for its cereals influences purchasing requirements, production goals, employment needs, inventories, and numerous other decisions. Similarly, the University of Michigan's income from tuition and sate appropriations will influence course offerings, staffing, salary increases for faculty and staff, and the like. Both of these examples illustrate that predicting revenues – revenue forecasting – is a critical element of planning for both profit and not-for-profit organisations.

Where do managers get the data for developing revenue forecasts? Typically, they begin by looking at historical revenue figures. For example, what were last year's revenues? This figure can then be adjusted for any significant trends discovered during environmental scanning. What revenue patterns have evolved over recent years? What changes in social, economic, or other factors in the general environment might after the pattern in the future? In the specific environment, what might our competitors be doing? Answers to such questions provide the basis for revenue forecasts.

3.4.2 Technological Forecast

Technological forecasting predicts changes in technology and the timeframe in which new technologies are likely to be economically feasible. The rapid pace of technological change has brought us innovations in lasers, biotechnology, robotics, and data communications has dramatically changed surgery techniques, pharmaceutical products, manufacturing processes used for almost every mass-produced product, and the use of computers and computer chips in products we use every day.The environmental scanning techniques discussed in the previous section can provide data on potential technological innovations.

To appreciate how important technological forecasting can be, consider what has happened in the recorded music industry. Look at the merchandise in any music industry today, you will discover that although customers still wanted to listen to music, but they preferred a new technology: compact disks. The record companies that correctly forecasted this technology and foresaw its impact on their business were able to convert their production facilities, adopt the technology, and beat their competition to the music store racks. Ironically, CDs are increasingly under attack from digital tape technology. Again, those in the music recording business who accurately forecast when, or if, digital tape technology will become the preferred music medium are likely to score big in the market.

3.5 Forecasting Techniques

Forecasting techniques fall into two categories: quantitative and qualitative. Quantitative forecasting applies a set of mathematical rules to a series of past data to predict outcomes. These techniques are preferred when management has sufficient "hard" data that can be used. Qualitative forecasting, in contrast, uses the judgement and opinions of knowledgeable experts. Qualitative techniques typically are used when precise data are limited or hard to obtain. Table 4.1 lists some of the best known quantitative and qualitative forecasting techniques.

One of the newest twists in forecasting uses internet-based software and is called CFAR, which stands for collaborative forecasting and replacement (Verity, 1996). CFAR offers a standardised way for retailers and manufacturers to work together (collaborate) on forecasts by using the internet to exchange numbers. Each organisation relies on its own data about past sales trends, promotion plans, and other factors to calculate a demand forecast for a particular product. If the organisations' forecasts differ by a certain amount (say, 10 per cent), the retailer and manufacturer use the internet link to exchange more data and written comments until they arrive at a single and more accurate forecast. This mutual and collaborative forecasting helps both organisations to do a better job of planning.

Table 4.1: Forecasting Techniques

Technique	Description	Application
Quantitative: Time series analysis	Fits a trend line to a mathematical equation and projects into the future by means of this equation.	Predicting next quarter's sales on the basis of four years of previous sales data.
Regression models	Predicts one variable on the basis of known or assumed other variables.	Seeking factors that will predict a certain level of sales (for example, price, and adverting expenditure).
Econometric models	Uses a set of regression equations to simulate segments of the economy.	Predicting change in car sales as a result of changes in tax laws.
Economic indicators	Uses one or more economic indicators to predict a future state of the economy.	Using change in GDP to predict discretionary income.
Substitution effect	Uses a mathematical formula to predict how, when, and under what circumstances a new product or technology will replace an existing one.	Predicting the effect of microwave ovens on the sale of conventional ovens.
Qualitative: Jury of opinion	Combines and averages the opinions of experts.	Polling all the company's human resource managers to predict next year's college recruitment needs.
Sales force composition	Combines estimates from field sales personnel of customers' expected purchases.	Predicting next year's sales of industrial lasers.
Customer evaluation	Combines estimates from established purchases.	Surveying of major dealers by a car manufacturer to determine types and quantities of products desired.

Source: Robbins, S.P. and Coulter, M. (1999). *Management*. (2nd ed.). New Jersey: Prentice Hall, Upper Saddle River, 07458.

3.6 Forecasting Effectiveness

Despite the importance of forecasting to strategic planning, managers have had mixed success in forecasting trends and outcomes. Forecasting

techniques are most accurate when the environment is not rapidly changing. The more dynamic the environment, the more likely managers are to develop inaccurate forecasts. Forecasting also is relatively unimpressive in predicting non-seasonal events such as recessions, unusual occurrences, discontinued operations, and the actions or reactions of competitors.

Although forecasting has a mixed record, various research studies have proposed some suggestions for improving forecasting effectiveness (Pant and Starbuck, 1990). First, use simple forecasting techniques. Simple forecasting techniques tend to be effective, and often better than complex methods, which tend to mistakenly confuse random data for meaningful information. A no-change forecast is accurate approximately half the time. Third, do not rely on a single forecasting method. Make forecasts with several models and average them, especially when making long-range forecasts. Fourth, do not assume that you can accurately identify turning points in a trend. What is typically perceived as a significant turning point often turns out to be an unusual random event. And fifth, shorten the length of forecasts to improve their accuracy because accuracy decreases as the period you are trying to predict increases.

3.7 Benchmarking

This is another strategic planning tool. It is the search for the best practices among competitors or non-competitors that lead to their superior performance (Weimer, 1992). The basic idea behind benchmarking is that managers can improve quality by analyzing and then copying the methods of the leaders in various fields. Even small companies are finding that benchmarking can bring big benefits. As such, benchmarking is a very specific form of environmental scanning.

Weimer (1992) recalled that Xerox Corporation was widely as the first US Company to systematically attempt benchmarking. According to him, before 1979, Japanese firms had been aggressively copying the successes of others by travelling around the world, watching what others were doing, then applying their new knowledge to improve their products and processes. Xerox's management couldn't discover how Japanese manufacturers could sell midsized copiers in the United States for considerably less than Xerox's production costs. So the company's head of manufacturing took a team to Japan to make a detailed study of their competitors' costs and processes. They got most of their information from Xerox's own joint venture partner, Fuji-Xerox, because it knew the competition well. What the team found was shocking. Their Japanese rivals were light-years ahead of Xerox in efficiency. Benchmarking those efficiencies marked the beginning of

Xerox's turnaround in the copier industry. Today, in addition Xerox, companies such as AT&T, DuPont, Ford, Kodak, and Motorola use benchmarking as a standard tool in their quest for performance improvement. In fact, some companies have chosen some pretty unusual benchmarking partners.

From the above discussion, it could be seen that benchmarking means spying the products and processes of others in order improve one's own product and process.

Benchmarking involves four steps, namely:

1. The organisation forms a benchmarking planning team. The team's initial task is to identify what is to be benchmarked, identify comparative organisations, and determine data collection method.
2. The team collects data internally on its own operations and externally from other organisations.
3. The data are analysed to identify performance gaps and to determine the cause of differences.
4. An action plan is prepared and implemented that will result in meeting or exceeding the standards of others.

The steps are illustrated graphically below in figure 4.1.

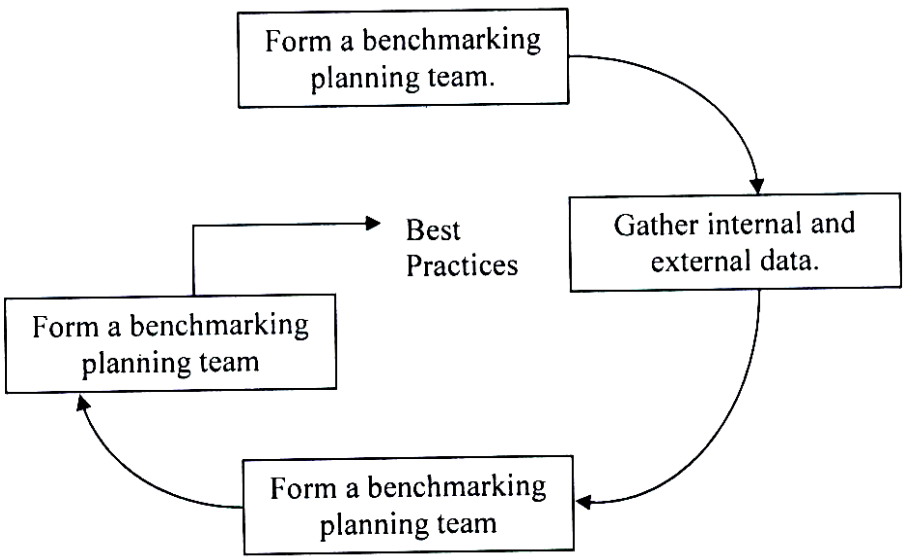

Fig. 4.1: Steps in Benchmarking

Source: Based on Shetty, Y.K. (1993). "Aiming High: Competitive Benchmarking for Superior Performance", *Long Range Planning*, February, p. 42

4.0 CONCLUSION

Forecasting means predictions of future outcomes. It is predicated on environmental scanning. Planning premises are the anticipated environment in which plans are expected to operate. They include assumptions or forecasts of the future and known conditions that will affect the operation of plans.

A forecast to determine future business conditions, sales volume, or political environment furnishes premises on which to develop plans. However forecast of the costs or revenues from a new capital investment translates a planning programme into future expectations. In the first case the forecast is prerequisite of planning while in the second, the forest is a result of planning.

More recently, environmental forecasting has become important. One approach to forecasting is the Delphi technique developed by the RAND Corporation. There are mainly two types of forecasts, viz: revenues forecast and technological forecast.

Forecasting techniques fall into two categories, namely: quantitative and qualitative. The quantitative forecasting applies a set of mathematical rules to a series of past data to predict outcomes. This technique is preferred by management when there is sufficient "hard" data that can be used to take a decision. In contrast, qualitative forecasting uses the judgement and opinions of knowledgeable experts and is mostly used when there is dearth of data or information.

5.0 SUMMARY

In this unit, we have defined forecasting, premising and benchmarking. We also enumerated and explained the various types of forecasting, differentiated between forecasting and premising, explained what is meant by environmental forecasting, and listed ways by which forecasting can be made effective.

6.0 TUTOR-MARKED ASSIGNMENT

i. How effective is forecasting as a planning technique?
ii. Describe the different types of forecasting.
iii. What does the benchmarking process involve?
iv. Differentiate between forecasting and planning premise.

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UNIT 5 THE ROLE OF CORPORATE PLANNERS IN AN ORGANISATION

CONTENTS

1.0 INTRODUCTION

In the last unit, we focused on forecasting and premising. We explained what is meant by environmental forecasting, and listed ways by which forecasting can be made effective.
In this unit, we shall dwell extensively on the role of a corporate planner in functional organisations. We would also consider the role of marketing planning in the context of corporate planning.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- define a corporate planner
- state the role of a corporate planner
- enumerate the functions of corporate planner in an organisation
- discuss the role of marketing planning in the context of corporate planning.

3.0 MAIN CONTENT

3.1 Who is a Corporate Planner?

A corporate planner is an expert or professional who is responsible for creating and distributing travel itineraries, meeting handouts, presentation materials, event invitations and all other written

documentation associated with the meeting or event in an organisation. The corporate planner is also responsible for securing all of the relevant equipment for the meeting or convention. This may include projectors, commuters, overhead screens, presentation boards and any other specialty devices.

3.2 Functions of a Corporate Planner

Corporate planners perform a wide variety of job functions. They act in a capacity similar to an executive administrative assistant without the extensive phone answering and note-taking duties. The corporate planner position varies greatly from company to company. Furthermore, corporate planner job titles are often given to employees that have very different job duties than a traditional corporate planner.

Corporate planners generally report directly to a senior level manager or executive. They are responsible for planning all of the manager's meetings and engagements. This includes all travel plans, bookings and attendees. The corporate planner may report to more than one manager or to a department. The planner is responsible for securing space, conference rooms, convention centers and other services for all major engagements. The planner would be responsible for notifying the attendees.

Corporate planners are also assigned direct duties in relation to their assigned senior manager or executive. The corporate planner is responsible for notifying her manager of board meeting and corporate meetings. The planner is responsible for booking all of the manager's individual, company related travel, and organising the trip from the hotel and transportation to the itinerary. In addition to travel and meeting, the planner is responsible for briefing her manager on all new projects and business developments.

3.3 The Role of a Corporate Planner in a Functional Organisation

Corporate planning is a specialist function and a corporate planner has responsibilities in his/her expert field to offer advice to those who have direct responsibilities for carrying the main operations such as the production manager, sales manager, and so on. A corporate planner may be a quality controller whose responsibility to ensure that at different stages of the production processes standard was strictly observed to ensure that the finished product conform to specification.

3.4 The Role of Marketing Planning in the Context of Corporate Planning

Corporate planning or strategic company planning comprises the following sequential steps (Lancaster, 2010).

- **Mission statement** (or defining the company mission) has an influence on all planning throughout the organisation, for it is a statement of the company's overall business philosophy. It is normally a set of guidelines, rather than something that is stated in hard and fast quantitative terms.
- **Situational analysis** means evaluating external and internal factors that will affect the planning process and asks the question "Where are we now?" This means researching and analysing all information that might have a bearing on the organisation and its operations, from internal factors like individual departmental company resources, to external factors like current political events that might impinge on the activities of the company.
- **Set organisational objectives** require company management to put forward guidance as to how the company should fulfill its mission and this clarifies where the company wants to be. These, unlike the mission statement, should be expressed in achievable quantitative terms.
- **Choose strategies to achieve these objectives** which are the concrete ideas that set about achieving company objectives and they relate to how the mission will be accomplished.

It is from this latter point that we can then start to plan strategically and tactically for marketing, as can other major divisions of the organisation, which include finance, production, human resource management and distribution. The function entrusted with bringing all of these separate planning functions together is termed corporate planning, and it is up to the person entrusted with corporate planning to ensure that one department's plans are in harmony with other departments' plans, and that they all work towards achieving the overall organisational objectives.

In forward thinking organisations, the managing director or chief executive is the corporate planner and in such an event, strategic planning is seen to be at the core of managerial activity, for it is this activity that drives the organisation. However, all too often, it is the case that as strategic planning concerns the longer term future, it can be push to one side in the interests of dealing with everyday tactical matters. To this extent, in larger organisations, corporate planning is often set up as a separate function reporting directly to top management, with the specific remit of bringing together and synergising all

individual departmental plans into the final corporate plan. Corporate planning is placed directly under top management in what is called a "staff" relationship, but is not a "line" relationship that is in the line of command of the company from the board of directors downwards (that is, it is not alongside marketing management in terms of the hierarchical structure).

(1) An Overview of Marketing Planning

Strategic marketing planning is the application of a number of logical steps in the planning process. There is no one clear formula that must always be applied and indeed one specific model would not suit every marketing planning situation. Different textbooks also cite slightly different models that are a variation on a similar general theme. The steps involved in strategic planning include the following.

(a) Situational Analysis

The mission statement has already been explained, but the next stage that relates to an analysis of the current situation is now explained for it has two inputs. The first input relates to the organisation's macro environment and these are factors over which the company has little or no control. They are listed under four separate headings: Political; Economic; Socio-cultural and Technological and are known by the acronym "PEST." Added to these factors, some marketing planners also add "Legal"(the acronym then being SLEPT) and some add "Competition," if these are felt to be specific issues. This is the external audit part of what is called the company audit. From this external audit a number of short statements are made in respect of each of the P.E.S.T. + C + L sub-divisions. The statements do not have to be justified, as they are mere observations that will help formulate more detailed plans at a later stage. Even more recently, some analysts have added both "Legal" and "Environmental" (making the acronym PESTLE).

The next part concerns what is called the company audit, or in corporate planning terms, the internal audit. This looks at the individual capabilities of the company, SBU by SBU, and again short statements or observations are made that do not have to be justified. These two actions are called the corporate auditing process and they go up to form the situational analysis. Marketing's part of this total corporate auditing procedure is termed the "marketing audit" and it is included here as part of marketing planning because it forms the beginning of the marketing planning process.

(b) SWOT Analysis

The SWOT (strengths, weaknesses, opportunities, threats) analysis is an attempt to translate company specific factors from the company audit into company strengths and weaknesses plus external environmental factors (from the PEST analysis) into external opportunities and threats. As was the case with the PEST analysis, no attempt should be made to justify the points being placed in each of the categories as it is meant as a statement which will assist marketing planning in the later stages.

In terms of its presentation, the SWOT analysis is normally put into a four box matrix with internal strengths and weaknesses being listed in the top two boxes and external opportunities and threats being listed in the lower two boxes. Experience has shown that for most companies, ranging from the very large to the very small, the number of strengths and weaknesses is around 10 - 15 each and the number of opportunities and threats is about five - 12 each. Any less normally indicates that the SWOT is incomplete and more indicates that a number of points are being repeated in different words.

(c) Marketing Objectives

These are concerned with what is to be achieved, unlike strategies that are referred to as the means of achieving objectives. These objectives are obtained from corporate level strategies and should be very specific. An acronym used in this context is that marketing objectives should be "SMART" - which stands for: specific; measurable; achievable; realistic and timely.

An objective must, therefore, have some kind of measurable characteristic which might relate to a standard of performance like a percentage level of profit or a situation that has to be achieved like penetrating a specific market.

(d) Forecast Market Potential

This is a stage in which lot of marketing planning texts seem to miss. It is illogical really, for without a forecast of the market potential, a company does not really know for what it should be making its plans. Forecasting is at the very base of company planning, and it is for medium and long term planning horizons that medium and long term sales forecasts are needed.

(e) Generate Marketing Strategies

Strategies are of course the means through which marketing objectives can be achieved. They are meant to detail selected approaches that the company will use to achieve its objectives.

Determining strategies leads to a series of action statements that are clear sets of steps to be followed to achieve the objectives. Operational decisions then spill out of these marketing strategies and these form the tactical foundations of the detailed marketing mix programmes.

(f) Assumptions and Contingency Plans

Assumptions relate to external factors over which the company has little control. These should be stated as a series of points that relate to, and which preface, the make-up of the detailed marketing mix plans in the next stage. Assumptions should be as few as possible and if they are not needed then they should not be introduced.

For each assumption, a contingency plan should be formulated so that in the case of an assumption being wrong, the appropriate contingency plan can be brought in. At this stage, contingency plans should not be detailed. They will only consist of a sentence or two that are merely directional plans to be implemented if assumptions are incorrect in practice.

(g) Detailed Marketing Mix Programmes

This part of the plan enables the organisation to satisfy the needs of its target markets and to achieve its marketing objectives. This indeed is what comprises the bulk of an organisation's marketing efforts. The first part of this programme is to determine the marketing mix, and here detailed consideration must be given to each of the areas of the "four Ps" together with customer considerations in terms of segmentation, targeting and positioning. All ingredients of the marketing mix must be combined in an optimum way so that they work together to achieve company objectives. This part of the plan is concerned with who will do what and how it will be done. In this way, responsibility, accountability and action over a specific time period can be planned, scheduled, implemented and reviewed.

As this is an action plan, the time period must be realistic. Most plans are for a period of one year, that is, the conventional planning period horizon. A plan must also contain time scales, which detail marketing activities normally on a month by month, or a quarter by quarter basis and indeed timing is addressed in the plan after the resourcing section.

This is not to say that marketing planning should not be for longer than one year; it is normally the case that long-term issues are also addressed in the marketing plan. Long-term will have different meanings for different industries. In the case of modern electronics, long-term is probably not longer than three years, whereas in steel production long-term can mean 10 years or more.

When long-term planning is addressed as part of a marketing plan, then all that can be realistically put forward is a directional marketing plan. To plan in terms of month by month expectations, for instance, five years, would cause the plan to be spuriously unrealistic, and when reality proved the plan to be hopelessly incorrect, then confidence might well be lost in the planning process. Many companies do have rolling plans that are modified in the light of what actually happened. As one planning period finishes (one month, one quarter, one year) the rolling plan will be modified in the light of what has happened, and a further planning period will be added on to the end of the plan.

An area of marketing planning that deserves specific attention here is that of attaining the sales revenues that have been forecasted as part of the planning process. Put in practical terms, the sales forecast has predicted the amount of sales that are possible, and budgeting (dealt with in the next section) will determine the expenditure available towards achieving this forecast. It does not, therefore, follow that the forecasted sales are intended to be exactly achieved in practice. Individual members of the field sales force will each have been given sales targets or quotas to reach, and the summation of all of these targets or quotas should equate to the budgeted for sales that each sales person must achieve towards reaching the planned for sales. This is why many sales personnel refer to their sales target or quota as their sales budget, which is not an expenditure limit. It is in fact a reference to the amount they must sell in order to satisfy the sales volume requirements of the marketing plan.

We have, of course, only considered "product;" thus, similar considerations need to be made in relation to other parts of the marketing mix. This part of the marketing plan is the largest section, and often this section, plus its various marketing mix sub-sections, is bigger than the rest of the plan put together.

(h) Budget Resources and Staffing

Now that detailed decisions have been made in relation to the different elements of the marketing mix, the next stage of the programme is to prepare the budget. Organisations have many demands on their limited resources, and it is this final balancing act that is the responsibility of

corporate planning. Budgeting covers not only general marketing expenditure, but also salaries and expenses for staffing. If the plan calls for an increase in sales and market share, then this will normally have resource implications for the marketing department, perhaps in terms of more representation or increased advertising costs.

At this budgeting stage, plans are sometimes modified in the light of reality, and the initial marketing objectives might well have to be modified as a result. Practical financial considerations might well cause the organisation to tone down its original marketing objectives.

(i) Time Scales

This normally takes the form of a Gantt chart which places time along the top and activities down the side.

(j) Implement the Plan

At this stage, the plan is now put into action within the predetermined budget and resource parameters, and along the time scale that has been agreed. More importantly, those who will carry out the plan should be informed of its details and know the part they must play within its implementation to ensure its success. In fact this section would not really be addressed in a planning document as it is self-evident, but it is shown as the "doing" part of the planning process.

(k) Measure and Control

A marketing plan cannot be operated without some measure to monitor-measure and control its progress. A system of controls should be established whereby the plan is reviewed on a regular and controlled basis and then updated as circumstances change. Such controls can address the tactics in terms of sales analyses that will commence with a comparison of budgeted sales revenue against actual sales revenue. Variations might be due to volume or price variances - perhaps an unfavourable variance being due to having to cut prices to match the tactical actions of competitors.

The marketing information system provides key inputs to the marketing planning. This information comes from market intelligence, marketing research and the organisation's internal accounting system. This information then inputs into the marketing plan. It is also control mechanism, because customer reactions are also fed into this MkIS from market intelligence through the field sales force or from marketing research studies. Information on sales analyses is also fed into the

system so assessments can be made as to whether forecasted sales are being achieved or not.

As the planning horizon unfolds and plans do not go exactly as anticipated, action can be then taken as required. These measures of performance allow planners an opportunity to adjust and fine tune plans as necessary during the planning period.

4.0 CONCLUSION

In any well-ordered modern company, managers have a duty to plan, organise, direct and control the activities of those for whom they have taken responsibility. The meaning and relevance of strategic and tactical marketing planning in an ordered framework of structures has been investigated. This has shown that planning is a practical activity that should be approached in a professional manner; as such plans will give guidance not only to top management, but also to those whose task it is to carry out such plans. More to the point, an ordered planning system will give more security to an organisation in terms of its vision and the image it presents to both its internal employees and to the outside world.

5.0 SUMMARY

In this unit, we have:

- defined a corporate planner
- stated the role of a corporate planner
- enumerated the functions of corporate planner in an organisation
- discussed the role of marketing planning in the context of corporate planning.

6.0 TUTOR-MARKED ASSIGNMENT

i. What are the logical steps in marketing planning? List them and explain.
ii. Who is a corporate planner and what are his functions?

7.0 REFERENCES/FURTHER READING

http://www.ehow.com/about_5483596_corporate-planner-job description.html#ixzz1h5fPZGlY

Geoff Lancaster (2010). Marketing Planning, info@da-group.co.uk

MODULE 3 PLANNING TOOLS AND TECHNIQUES

UNIT 1 BUDGETS

CONTENTS

1.0 INTRODUCTION

In the last unit, we discussed corporate planner extensively. In this unit, we shall examine budgets as one of the vital planning tool techniques for managers in an organisation.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- define budget
- enumerate the types of budgets
- classify budgets into variable and fixed
- discuss the importance of budget
- list and discuss the various methods for capital investment criterion.

3.0 MAIN CONTENT

3.1 Budget

Most of us have had some experience, as limited as it might be, with budget. We probably learnt about them at a very early stage when we discovered that unless we allocated our "revenues" carefully, our weekly allowance was gone before the week was half.

A budget, according to Robbins and Coulter (1999), is a numerical plan for allocating resources to specific activities. Managers typically prepare budgets for revenues, expenses, and large capital expenditures such as machinery and equipment. It's not unusual, though, for budgets to be used for improving time, space, and the use of material resources. For instance budgets can be provided for on daily basis for such items as person-hours, capacity utilisation, or units of production and other monthly activities.

Pandey (1979) also defined budget is a comprehensive and coordinated plan, expressed in financial terms, for the operations and resources allocation of an enterprise for some specific period in the future. It I also a systematic and formalised approach for stating and communicating the firm's expectations and accomplishing the planning, coordination and control responsibilities of management in such a way as to maximise a given resources to realise objectives.

Inua (2011) stated that a formal definition of budget as "a quantitative statement for a defined period of time, which may include planned revenues, expenses, assets, liabilities and cash flows. A budget provides a focus for the organisation aids the coordination of activities and facilitates control.

3.2 Importance of Budgets

A budget is a tool that helps managers in both their planning and control functions. Interestingly, budgets help managers with their control function, not only by looking forward, but also by looking backward. Budgets deal with what managers' plan for the future. However, they can also be used to evaluate what happened in the past. Budgets can be used as a benchmark that allows managers to compare actual performance with estimated or desired performance. From the foregoing, we can say that a budget is a formal business plan. Planning and budgeting are especially important to keep an organisation going.

Most business organisations use budgets to focus attention on the company operations and finances, not just to serve as a limit to spending. Budgets highlight potential problems and advantages early, allowing managers to take steps to avoid these problems or use the advantages wisely (Inua, 2011).

Budgets are probably popular because they are applicable to a wide variety of organisations and units within an organisation. We live in a world in which almost everything is expressed in monetary units. It seems logical, then, that monetary budgets would be a useful tool for directing activities in such diverse departments as production and marketing research or at various levels in an organisation. Budgets are one planning device that most managers, regardless of organisational level, help formulate.

Recent surveys show just how valuable budgets can be. Study after study has shown the budget to be the most widely used and highest rated tool for cost reduction and control. Advocates of budgeting go so far as to claim that the process of budgeting forces a manager to become a better administrator and puts planning in the forefront of the manager's word. Actually, many seemingly healthy businesses have died because managers failed to draw up, monitor and adjust budgets to changing conditions.

Budgets are used to distribute funds and other resources among different users departments on the bases of priorities of programmes and projects. Other importance of budget according to Inua (2011) includes:

(1) acting as a target
(2) acting as a plan
(3) being a control measure
(4) a means of motivating managers
(5) acting as a device for measuring performance
(6) promoting a goal congruence

(7) acting as a medium of communication and coordination
(8) acting as a framework for the delegation of authority and so on.

3.2.1 Advantages of Budgeting

The advantages of budgeting are as listed below.

1. It is the major formal way in which the organisational objectives are translated into specific plans, tasks and objectives related to the individual managers and supervisors.
2. It is an important medium of communication for organisational plans and objectives, and of monitoring the progress towards meeting those objectives.
3. The development of budgets helps to achieve coordination between the various departments and functions of the organisation.
4. The involvement of all levels of management with setting budgets, the acceptance of defined targets, the two-way flow of information and the facets of a properly organised budgeting system will help to promote a coalition of interest and to increase motivation.
5. Management's time can be saved and attention directed to areas of most concern by the "exception principle," which is at the heart of the budgetary control.
6. Performance of all levels is systematically reported and monitored thus aiding the control of current activities.
7. The investigation of operations and procedures which is part of budgeting, planning and the subsequent monitoring of expenditure, may lead to reduced costs and greater efficiency.

3.2.2 Disadvantages of Budgeting

Inua (2001) listed the difficulties which may occur in connection with budgeting as follows.

1. There may be too much reliance on the technique as a substitute for good management.
2. The budgeting system, perhaps because of undue pressure or poor human relations, may cause antagonism and decrease motivation.
3. Variances are just as frequently due to changing circumstances, poor forecasting or general uncertainties and due to managerial performance.
4. Budgets are developed round existing organisational structures and departments which may be inappropriate for current conditions and may not reflect the underlying economic realities.

5. The very existence of well-documented plans and budgets may cause inertia and lack of flexibility in adapting to change.
6. There are inherent lags and delays in the system.

3.3 Types of Budgets

Budgets can be used for a number of areas or items. We are going to look at the ones managers are most likely to use. They include:

- revenue budget
- expense budget
- profit budget
- cash budget
- capital expenditure budget
- operating budget
- master/comprehensive budget
- financial budget

3.3.1 Revenue Budget

The revenue budget is a specific type of revenue forecast. It is a budget that projects future sales. If the organisation could be sure of selling everything it produced, revenue budgets would be very accurate. Managers would need only to multiply the sale price of each product by the quantity it could produce. However, such situations rarely exist. Managers must take into account their competitors' actions, planned advertising expenditures, sales force effectiveness, and other relevant factors and make an estimate of sale volume. In addition, based on the estimates of product demand at various prices, managers must select an appropriate sales price. Then they multiply sales volume by sales price for each product to get the revenue budget.

3.3.2 Expense Budget

Whereas revenue budgets are essentially a planning device for marketing and sales activities, expenses budgets are found in all units of profit and non-profit organisations. Expense budgets list the primary activities undertaken by a unit to achieve its goals and allocate an amount to each. Lower expenses, when accompanied by stable quantity and quality of output, lead to greater efficiency.

In times of intense competition, economic recession, or the like, managers typically look first at the expense budget as a place to make reduction and improve economic inefficiencies. Because not all expenses are linked to volume, they do not decline at the same rate when

product demand drops. Managers pay particular attention to their so called fixed expenses – those that remains relatively unchanged regardless of volume. As production levels fall, the variable expenses tend to control themselves because they decrease with volume.

3.3.3 Profit Budget

Organisational units that have easily determined revenues are often designated as profit centres and use profit budgets for planning and controlling. Profit budgets combine revenue and expense budgets into one. They are typically used in large organisations that have multiple facilities and divisions.

Each manufacturing plant, for instance, might measure its monthly expenses (including a charge for corporate overhead) against its monthly revenues. In fact, some organisations create artificial profit centres by developing transfer prices for intra-organisational transactions. For instance, the exploration division of a multinational company such as Texaco produces oil only for Texaco's refining division, so the exploration unit has no "real" sales. However, Texaco turned the exploration unit into a profit centre by establishing prices for each barrel of oil the division drills and then "sells" to the refining division.

The internal transfers create revenue and allow managers in that division to formulate and be evaluated against their profit budget.

3.3.4 Cash Budget

Cash budgets are forecasts of how much cash the organisation will have on hand and how much it will meet its expenses. The budget can reveal potential cash flow shortages or surpluses. This will in turn allow the organisation to take decisions on how to profitably reinvest excess cash and or request for cash to meet daily operations if a deficit is apparent.

3.3.5 Capital Expenditure Budget

Investments in property, buildings, and major equipment are called capital expenditures. These are typically substantial expenditures in terms of both magnitude and duration. The magnitude and duration of these investments justify the development of separate budgets for capital expenditures. Such capital expenditure budgets allow managers to forecast future capital requirements, to keep on top of important capital projects, and to ensure that adequate cash is available to meet these expenditures as they become due.

Still on capital expenditure budgets, every company needs to decide where and how to spend its money on major projects that will affect its financial results for years to come. Such decisions require investments of large amounts of resources (capital) that are often called capital outlays. The term "capital budgeting" describes the long-term planning for making and financing such outlays.

Capital budgeting according to Inua (2011) has three phases, these are:

(1) identification of potential investments
(2) choosing which investments to make (which includes gathering data to aid the decision); and
(3) follow-up monitoring of these investments.

Usually, accountants are only involved in the second and third phases. The question is: "Why are accountants involved in capital budgeting decisions?" This is because they function primarily as information specialists. As you know, one of the purposes of a cost management system is to provide cost measurement for strategic decisions such as major capital budgeting decisions.

Accountants will gather and interpret as much information as possible to help management to make such decisions. To help organise what could be pages and pages worth of information, accountants rely on capital budgeting models. Let us look at how some of these models work.

For planning purposes, the following methods for allocating funds for capital projects are:

(a) accounting rate of return
(b) payback period
(c) net present value (NPV)
(d) internal rate of return (IRR).

(a) Accounting Rate of Return Method

This method is derived from the concept of Return on Capital Employed (ROCE) or Return on Investment (ROI) because it measures the ratio of accounting profits to the accounting investments and evaluates projects based on this ratio. This is a basic definition only and variations exist in the definitions as would be seen in the following examples:

- profit may be before or after tax
- capital may or may not include working capital

- capital invested may mean the initial capital investment or the average of the capital invested over the life of the project.

The following two ways of determining the ratios are acceptable for examination purposes:

(i) ARR

= Average annual accounting profit after depreciation, interest before taxation x 100%

Initial capital invested

Where the initial capital invested is equal to original cost of a new project or the written down value or net book value of an existing project. The reason for this assertion is that, since companies are going concern, there must be replacement of assets, that is, the need for depreciation.

(ii) ARR

= Average annual accounting profits after depreciation, interest before taxation x 100%

Average capital invested

Where the average capital invested is equal to initial capital invested plus scrap value (if any) divided by two. You should note that if a particular question specifically defines the accounting rate of return, such definition, as stipulated in the question must be adopted in solving the question.

Advantages of ARR

1. It is easy to calculate.
2. It makes use of all the profits for all the years of project.
3. For divisionalised companies, managers would find the technique easier to understand because it is similar to their normal annual performance evaluation technique.

Disadvantages of ARR

1. It does not recognise the time value of money.
2. It is an average concept and as such will hide the sizes and timing of the individual cash flow.

3. It is based on accounting profits which may differ as a result of differences in accounting methods and does not necessarily represent relevant cash flows.
4. It recognises depreciation instead of the more relevant capital allowances.
5. It does not take into consideration the risk associated with each project as well as the attitude of the management of the company to risk.
6. There is no unique definition of ARR. For instance, "average profits" may be profits after depreciation, interest and tax. Initial investment could be initial investment plus scrap value or just initial investment.

(b) Payback Period Method

This technique measures projects based on the period over which the investment pays back itself or the period of recovery of the initial investment. Payback is defined as the period usually expressed in years, in which the cash outflows will equate the cash inflows from a project.

It is evident that this method pays attention to the shortness of the project, which is, the shorter the period of recovery of initial outlay, the more acceptable the project becomes and this constitutes the decision rule.

Illustration

Kaura Investment Limited has a project which involves immediate cash outlay of ₦100, 000.00. The company estimates that the net cash inflows from the project will be as follows:

Year	**Cash flow (₦)**
1	20,000.00
2	20,000.00
3	140,000.00
4	40,000.00

Calculate the payback period for the above project.

Solution:

Kaura Investment Limited – Investment Appraisal

Year	**Cash flow (₦)**	**Consecutive Cash flows**
0	(100,000.00)	(100,000.00)
1	40,000.00	(60,000.00)
2	80,000.00	20,000.00
3	60,000.00	80,000.00
4	40,000.00	

Payback period = 2 years + $\frac{120,000}{100,000}$ x 12 months

= 2 years + 14.4 months ≈ 3 years 2.4 months

Decision Rules

(a) Using the payback method, accept all projects whose payback period are shorter than the company's predetermined minimum acceptable payback period.
(b) If mutually exclusive projects are involved, whereby only one of the projects can be undertaken and others rejected, the rule is to accept the project with the shortest payback period.

Advantages of Payback Period

(1) It is simple to calculate and understand.
(2) It is the least of all the methods of capital budgeting in exposing the firm to problems of uncertainty, since it focuses on shortness of project to pay back the initial outlay.
(3) It is a fast screening technique, especially for the firms that have liquidity problems.

Disadvantages of Payback Period

(1) It does not incorporate time value of money, that is, it does not recognise the fact that the value of ₦1.00 today will be far more than the value of ₦1.00 in two or three years' time. This constitutes the alternative forgone of money due to passage of time and not inflation.
(2) It ignores cash flows after the payback period.
(3) It does not take into account the risks associated with each project and the attitude of the company to risk.

(c) Net Present Value Method (NPV)

The net present value is a summation of all discounted cash flows (present value) associated with a project. The NPV method computes the present value of all expected future cash flows using a minimum desired rate of return. The minimum rate of return depends on the risk of a proposed project – the higher the risk, the higher the rate. Based on the cost of capital (what the firm pays to acquire more capital), managers determine the sum of the present values of all expected cash flows from the project.

You should note that cost of capital is also called required rate of return, hurdle rate or discount rate. If the sum of the present values of all expected cash flows from the project is positive, the project is desirable. If the sum is negative, the project is undesirable.

A positive NPV means that accepting the project will increase the value of the firm because the present value of the project's cash inflows exceeds the present value of its cash outflows. When choosing among several investments, managers should pick the one with the greatest net present value.

Decision Rules

(a) Accept all projects that produce positive net present value.
(b) If mutually exclusive projects are involved, the rule is to accept the project that produces the highest positive net present value.

Advantages of NPV

(1) The time value of money is recognised.
(2) It measures, in absolute terms (₦ value), the increase in the wealth of the shareholders.
(3) It is additive, in that decisions can be reached on a combination of projects, through the addition of their respective NPVs.
(4) Unlike the payback period, NPV measures projects by the utilisation of all cash flows of the project.
(5) It is more preferable to internal rate of return (IRR) in decisions under capital rationing, that is, shortage of investment funds.

Disadvantages of NPV

(1) It is more difficult to calculate than payback and accounting rate of return.
(2) It relies heavily on the correct estimation of the cost of capital. Where errors occur in the cost of capital used for discounting decision, using the NPV would be misleading.
(3) Unlike the IRR, non-accounting managers may not be conversant with the decision rule of NPV, especially in large decentralised organisations.
(4) Like all the other methods, it does not take risk into account.
(5) It ignores inflation.

(d) Internal Rate of Return (IRR) Method

The IRR is that cost of capital that will produce an NPV of zero if applied to a project. It is a breakeven point cost of capital. It is also the cost of capital that will equate the cash inflows of a project with the cash outflows of that project. In order to generate the cost of capital that will produce exactly zero NPV, the following procedures may be followed.

(1) Generate two opposite values of NPV (+ and – values) using two different discount rates earlier.
(2) Interpolate between the two discount rates generated in (1) above, in order to estimate the cost of capital that will produce an NPV of zero.
(3) The interpolation formulae can be defined as:

$$IR = R_1 + \frac{NPV_1}{(NPV_1 + NPV_2)} \times R_2 - R_1$$

Where R_1 is the lower cost of capital that generates positive NPV_1, and

R_2 is the highest cost of capital that generates negative NPV_2.

You should note that the absolute value of the negative NPV is what is used in the computation.

Decision Rules

(a) Using the IRR technique, the rule is to accept all projects whose IRR are greater than the company's cost of capital.
(b) If mutually exclusive projects are being considered, the rule is to accept the project that produces the highest IRR.

Advantages of IRR

(1) It recognises the time value of money.
(2) It is more attractive to divisional managers in large organisations since they are used to the return approach in evaluations.
(3) It provides to us a margin of safety in the calculation of a company's cost of capital, that is, it measures all allowable margin of errors.

Disadvantages of IRR

(1) It is difficult to calculate than the other methods.
(2) Where the cash flows of a project are unconventional, in which case, cash inflows occur in between cash outflows and vice versa, the IRR technique will produce more than one IRR for a project. It can lead to a situation of sub-optimal decision.
(3) Where mutually exclusive projects are being considered, the IRR may produce a decision that will conflict with the NPV decision in that the IRR, being a rate of return, does not recognise the size or scale of project.
(4) A project may produce more than one IRR. This also occurs when a project has unconventional cash flows.

3.3.6 Operating Budget

Operating budgets allocate resources to various functional programmes or activities as well as resources for individual responsibility for example production budget, sales budget, purchasing budget, advertising budget, training and development budget.

3.3.7 Master/Comprehensive Budget

This is a generic budget, which takes into consideration many changes, corporate activities and their impact on corporate objectives. It consists of three important budgets; they are capital budget, operating budget and financial budget. They all show the total resource allocation of the organisation.

The master budget, according to Inua (2011), represents a consolidation of all the supporting budgets and represents the financial effects of the total plan for the business as a whole. The terms used to describe specific budget schedules vary from one organisation to another. However, most master budgets have common elements. The usual master budget for a non-manufacturing company has the following components.

(a) Operating budget

1. Sales budget
2. Purchases budget
3. Cost-of-goods sold budget
4. Operating expenses budget
5. Budgeted income statement

(b) Financial budget

1. Capital budget
2. Cash budget
3. Budgeted balance sheet

In addition to these categories, manufacturing companies that maintain inventories prepare ending inventory budgets and additional budgets for each type of resource existing such as labour, materials and factory overheads.

Each of the parts of the master budget is prepared in the conventional manner except that budgeted costs, revenues, investments and so on, are used instead of historical figures.

The two major parts of a master budget are the operating budget and the financial budget. The operating budget focuses on the income statement and its supporting schedules. The financial budget focuses on the effects that the operating budget and other plans such as capital budgets and repayments of debt will have on cash. In addition to the master budget, there are countless forms of special budgets and related reports. For example, a report might detail goals and objectives for improvements in quality or customer satisfaction during the budget periods.

The master budget, supported by the subsidiary budgets is presented to top management for approval. If approval is given, the master budget becomes the financial summary of the agreed plan for the budget period being considered, usually for the year ahead. If not approved, amendments are made in underlying budgets (such as the sales budget, the production budget, and so on) to bring about the desired effects on the master budget.

3.3.8 Financial Budget

This is the financial implication of resources allocated to various operations. It consists of expected cash inflows and outflows, financial position and operating results. Its components include cash budget,

projected pro-forma balance sheet and income statement, and statement of changes in financial position of the organisation (sources and application or uses of funds).

3.4 Classification of Budgets

Budgets can also be classified into variable and fixed budgets. The budgets just described are based on the assumption of a single specified volume; that is, they are fixed budgets. They assume a fixed sales or production volume. Most organisations, however, are not able to predict volume accurately. Moreover, some costs such as labour, materials, and some administrative expenses – vary with volume.

Variable budgets are designed to deal with these variations. Because plans can change, standards need to be flexible to adapt to changes. Variable budgets represent flexible standards. They can help managers to better plan costs by specifying cost schedules for varying levels of volumes.

4.0 CONCLUSION

We learnt from the unit that budgets are a numerical plan for allocating resources to specific activities. We also learnt that budgets are important because they are one planning device used by most managers, regardless of organisational level to guide their day to day operations.

Capital investment decision was described as a firm's decision to invest its current funds in long term activities in anticipation of an expected flow of future benefits over a number of years. You would also recall that the capital budgeting models such as: accounting rate of return (ARR), payback period, net present value (NPV) and internal rate of return (IRR) were discussed. We stated that:

- accounting rate of return measures the ratio of accounting profits to the accounting investments in evaluating projects;
- payback period method measures projects on the basis of the period over which the investment pays back itself or the period of recovery of the initial investment;
- net present value method is a summation of all discounted cash flows (present value) associated with a project;
- internal rate of return method is the cost of capital that will equate the cash inflows of a project with the cash outflows of that project.

Finally, we stated that the master budget represents a consolidation of all the supporting budgets and represents the financial effects of the total plan for the business as a whole.

5.0 SUMMARY

In this unit, we have:

- defined budget
- enumerated the types of budgets
- classified budgets into variable and fixed
- discussed the importance of budget
- listed and discussed the various methods for capital investment criterion.

6.0 TUTOR-MARKED ASSIGNMENT

i. What is a master budget?
ii. State five advantages of budgeting.
iii. State four disadvantages of budgeting.
iv. Write short notes on each the following: revenue budget, expense budget, profit budget, cash budget, capital expenditure budget, operating budget and master/comprehensive budget.

7.0 REFERENCES/ FURTHER READING

Robbins, S.P. & Coulter, M. (1999). *Management*. (2nd ed.). New Jersey: Prentice Hall, Upper Saddle River, 07458.

Inua, O.I. (2011). "Management Accounting." NOUN Study Materials for Undergraduate Programme in Entrepreneurial and Business Management.

UNIT 2 OPERATIONAL PLANNING TOOLS II – SCHEDULING

CONTENTS

1.0 INTRODUCTION

In the last unit, we defined budget, enumerated the types of budgets, classified budgets into variable and fixed and discussed the importance of budget.

In this unit, we shall be looking at the other operational planning tools available to managers to assist their work in planning for the organisation. This discussion will dwell on scheduling, Gantt charts, load charts and PERT network analysis.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- define scheduling
- demonstrate the use of Gantt and load charts
- define and discuss Gantt and load charts
- define PERT network analysis and demonstrate the use of this tool for operational planning purpose.

3.0 MAIN CONTENT

3.1 Scheduling

Robbins and Coulter (1999) defined scheduling as a list of necessary activities, their order of accomplishment, who is to do each activity, and the time needed to complete them. For instance, if you were to observe

a group of supervisors or department managers for a few days, you would see them regularly detailing what activities have to be done, the order in which they are to be completed, who is to do them and the timeframe within which to complete the tasks. These managers are doing what we call scheduling.

The following are the tools under scheduling.

- Gantt charts
- Load charts
- Programme Evaluation and Review Technique (PERT)

3.1.2 Gantt Charts

Gantt chart is a scheduling chart which shows actual and planned output over a period of time. It was developed during the early 1900s by Henry Gantt, an associate of the scientific management expert, Frederick Taylor. The idea behind a Gantt chart is simple. It is essentially a bar graph, with time on the horizontal axis and the activities to be scheduled on the vertical axis. The bars show output, both planned and actual, and compare that with the actual progress on each. It is a simple but important device that allows managers detail easily what has yet to be done to complete a job or project and to assess whether an activity is ahead of, behind, or on schedule.

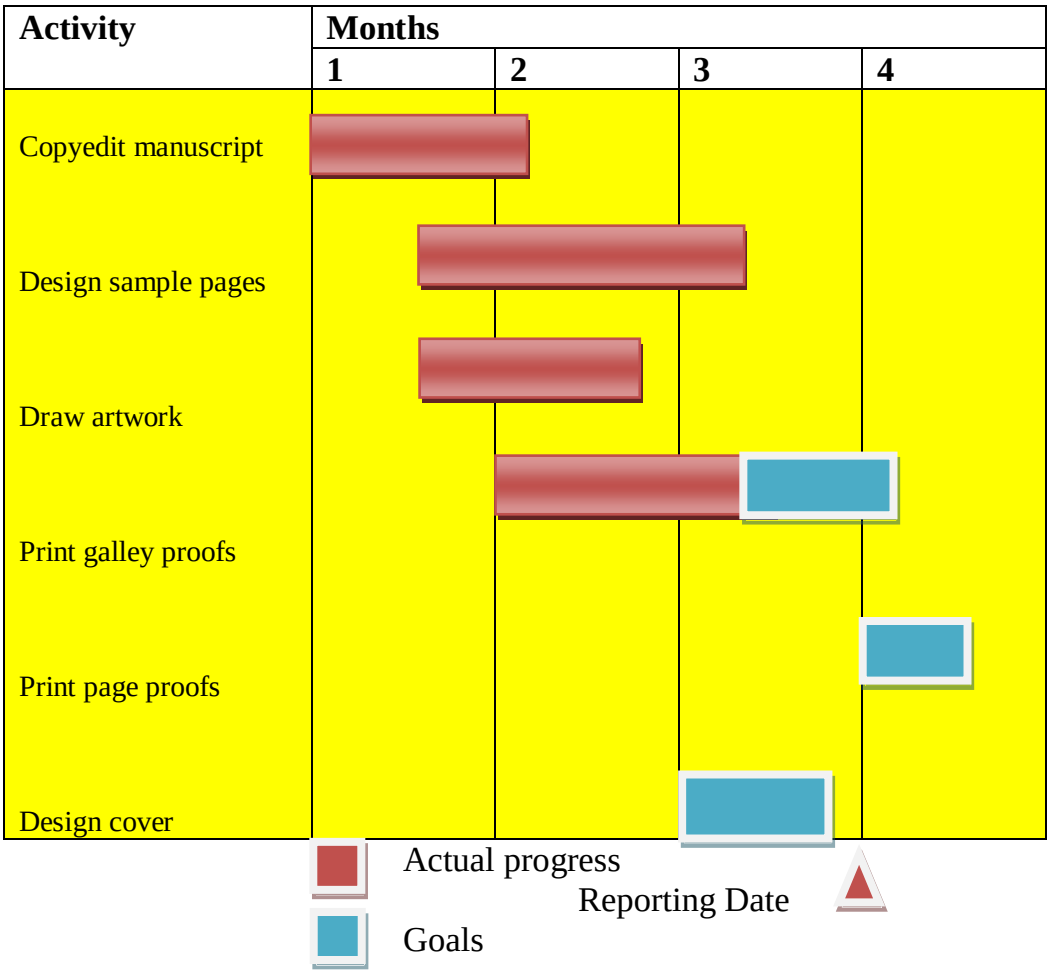

Figure 2.1: Gantt Chart

Source: Robbins, S.P. & Coulter, M. (1999). *Management.* (2nd ed.). New Jersey: Prentice Hall, Upper Saddle River, 07458.

Figure 2.1 depicts a simplified Gantt chart that was developed for book production by a manager in a publishing firm. Time is expressed in months across the top of the chart. The major activities are listed down the left side. The planning comes in deciding what activities need to be done to get the book finished, the order in which those activities need to be completed, and the time that should be allocated to each activity. Where a box sits within a timeframe reflects its planned sequence. The shading represents actual progress. The chart becomes a control tool when the manager looks for deviations from the plan. In this example, both the design of the cover and the printing of page proofs are running behind schedule. Cover design is about three weeks behind, and page proof printing is about two weeks behind schedule. Given this information, the manager might need to take some corrective action either to make up for the two lost weeks or to ensure that no further

delay will occur. At this point, the manager can expect that the book will be published at least two weeks later than planned if no corrective action is taken.

3.1.2 Load Charts

Robbins and Coulter (1999) defined a load chart as a modified Gantt chart that schedules capacity by work stations. Instead of listing activities on the vertical axis, load charts list either whole departments or specific resources. This arrangement allows managers to plan and control for capacity use.

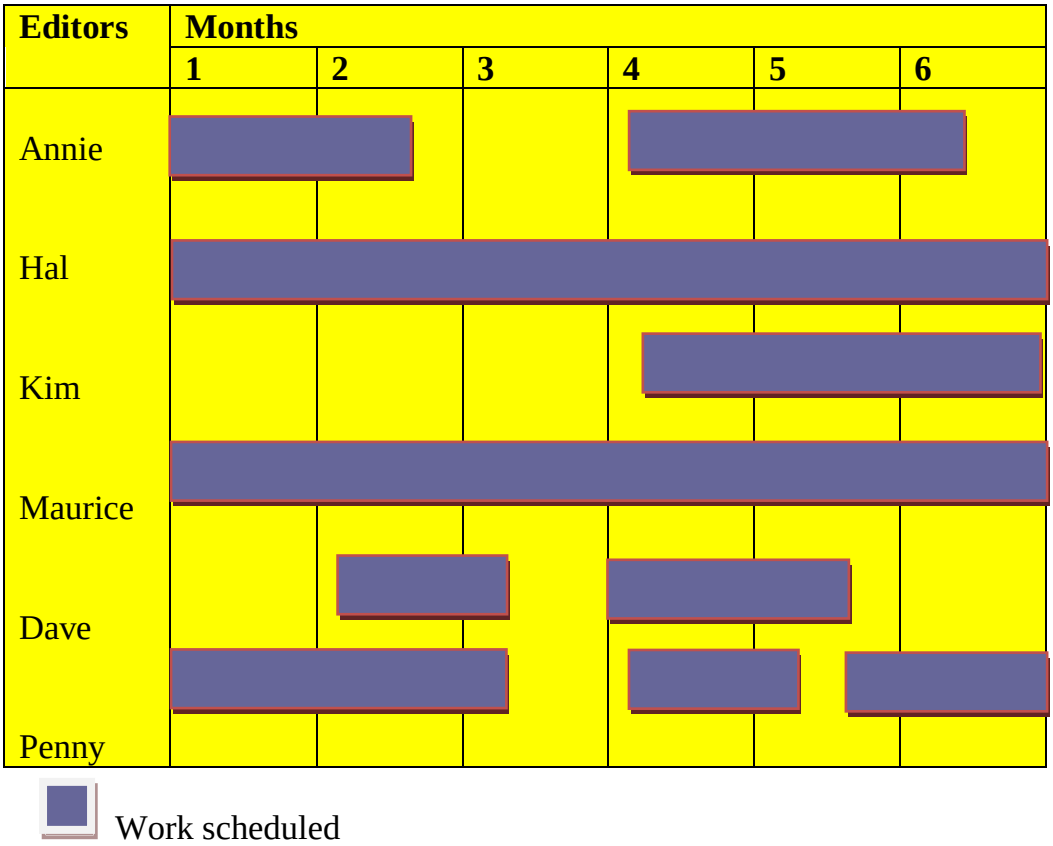

Fig. 2.2: Load Chart

Source: Robbins, S.P. & Coulter, M. (1999). *Management*. (2nd ed.). New Jersey: Prentice Hall, Upper Saddle River, 07458.

For example, figure 2.2 shows a load chart for six production editors at the same publishing firm. Each editor supervises the production and design of several books. By reviewing a load chart like the one shown in figure 2.2, the executive editor, who supervises six production editors, can see who is free to take on a new book. If everyone is fully scheduled, the executive editor might decide not to accept any new

projects, to accept new projects and delay others, to make the editors work overtime, or to employ more production editors. In figure 2.2, only Hall and Maurice are completely booked for the next six months. The other editors have some unassigned time, so they might be able to accept one or more new projects.

3.1.3 Programme Evaluation and Review Technique (PERT) Network Analysis

A technique for scheduling complicated projects comprising many activities, some of which are interdependent.

Gantt and load charts are useful as long as the activities being scheduled are few in number and independent of each other. However, what if a manager had to plan a large project such as unit reorganisation, the implementation of a cost-reduction campaign, or the development of a new product that required coordinating inputs from marketing, production, and product design personnel? Such projects require coordinating hundreds, and even thousands, of activities, some of which must be done simultaneously and some of which cannot begin until earlier activities have been completed.

If you are constructing a building, you obviously cannot start putting up the walls until the foundation is laid. How, then, can you schedule such a complex project? The programme evaluation and review technique (PERT) is highly appropriate for such projects.

PERT network analysis as it is usually called was originally developed in the late 1950s for coordinating the more than 3,000 contractors and agencies working on the Polaris submarine weapon system (Fearon, Ruch, Reuter, Wieters, & Reck, 1986). This project was incredibly complicated, with hundreds of thousands of activities that had to be coordinated. PERT is reported to have cut two years off the completion date for the project.

A PERT network is a flowchart-like diagram that depicts the sequence of activities needed to complete a project and the time or costs associated with each activity. With a PERT network, a project manager must think through what has to be done, determine which events depend on one another, and identify potential trouble spots. PERT also makes it easy to compare the effects alternative actions might have on scheduling and costs. Thus, shift resources as necessary to keep the project on schedule.

To understand how to construct a PERT network, you need to know four terms: events, activities, slack time, and critical path. Let us define

these terms, outline the steps in the PERT process, and then look at an example.

1. **Events** are end points that represent the completion of major activities.
2. **Activities** represent the time or resources required to progress from one event to another.
3. **Slack time** is the amount of time an individual activity can be delayed without delaying the whole project.
4. The **critical path** is the longest or most time-consuming sequence of events and activities in a PERT network. Any delay in completing events on this path would delay the completion of the entire project. In other words, activities on the critical path will have zero slack time.

Developing a PERT network requires a manager to identify all key activities needed to complete a project, rank them in order of occurrence, and estimate each activity's completion time. This process can be translated into five specific steps, which are outlined in table 2.1.

Table 2.1: Steps in Developing a PERT Network

S/N	Steps
1.	Identify every significant activity that must be achieved for a project to be completed. The accomplishment of each activity results in a set of events or outcomes.
2.	Determine the order in which these events must be completed.
3.	Diagram the flow of activities from start to finish, identifying each activity and its relationship to all other activities. Use circles to indicate events and arrows to represent activities. This result in a flowchart diagram called a PERT network.
4.	Compute a time estimate for completing each activity. This is done with a weighted average that uses an optimistic time estimate (t_0) of how long the activity would take under ideal conditions, a most-likely estimate (t_m) of the time the activity normally should take, and a pessimistic estimate (t_p) that represents the time that an activity should take under the worst possible conditions. The formula for calculating the expected time (t_e) is then: $t_e = \frac{t_0 + 4t_m + t_p}{6}$
5.	Using the network diagram that contains time estimates for each activity, determine a schedule for the start and finish dates of each activity and for the entire project. Any delays that occur along the critical path require the most attention because they can delay the whole project.

Source: Fearon, H.E., Ruch, W.A., Reuter, V.G, Wieters, C.D. & Reck, R.R. (1986). *Fundamentals of Production/Operations Management*. (3rd ed.). (St. Paul, MN: West Publishing), p. 97.

Another example to illustrate the PERT Network is in respect of the erection of an office building (see table 2.2).

Table 2.2: A PERT Network for Erecting an Office Building

Event	Description	Expected Time (in weeks)	Preceding Event
A	Approve design and get permits	10	None
B	Dig subterranean garage	6	A
C	Erect frame and siding	14	B
D	Construct floor	6	C
E	Install windows	3	C
F	Put on roof	3	C
G	Install internal wiring	5	D, E, F
H	Install elevator	5	G
I	Put in floor covering and paneling	4	D
J	Put in doors and interior decorative trim	3	I, H
K	Turn over to building management group	1	J

Source: Kimbler, D.L. (1993). "Operational Planning: Going Beyond PERT with TQM Tools." *Industrial Management*, September-October, pp. 26 – 29; Strassman, P.A. (1988). "The Best-Laid Plans", Inc., October, pp. 135 – 188.

As we noted at the beginning of this section, most PERT projects are complicated and may include hundreds or thousands of events. Such complicated computations are best done with a computer using specialised PERT software (Strassman, 1988 & Kimbler, 1993). For our purposes, however, let us work through a simple example. Assuming that you are the superintendent at a construction company. You have been assigned to oversee the construction of an office building. Because time really is money in your business, you must determine how long it will take to get the building built. You have carefully broken down the entire project into specific activities and events. Table 2.3 outlines the major events in the construction project and your estimate of the expected time required to complete each activity. Figure 2.3 shows the PERT network based on the data in table 2.2. You have also calculated the length of time that each path of activities will take:

A-B-V-I-J-K (44 weeks)
A-B-C-D-G-H-J-K (50 weeks)
A-B-C-E-G-H-J-K- (47 weeks)
A-B-C-F-G-H-J-K (47 weeks)

Your PERT network shows that if everything goes as planned, the total project completion time will be 50 weeks. This is calculated by tracing the project's critical path (the longest sequence of activities): A-B-C-D-G-H-J-K and adding up the times. You know that any delay in completing the events on this path would delay the completion of the entire project (in other words, there is no slack time – slack time is zero).

Taking six weeks instead of four to put in the floor covering and paneling (Event I) would have no effect on the final completion date. Why? …Because that event is not on the critical path. But taking seven weeks instead of six to dig the subterranean garage (Event B) would likely delay the total project. A manager who needed to get back on schedule or to cut the 50-week completion time would want to concentrate on those activities along the critical path that could be completed faster.

How might the manager do this? He or she could look to see if any of the other activities not on the critical path had slack time in which resources could be transferred to activities that were on the critical path.

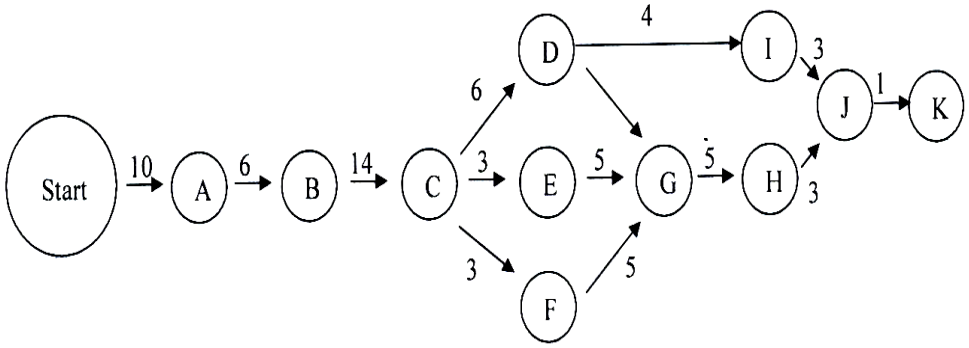

Fig. 3: A PERT Network for Erecting an Office Building

Source: Kimbler, D.L. (1993). "Operational Planning: Going Beyond PERT with TQM Tools." *Industrial Management*, September-October, pp. 26 – 29; Strassman, P.A. (1988). "The Best-Laid Plans", Inc., October, pp. 135 – 188.

4.0 CONCLUSION

Gantt chart is a scheduling chart, which shows actual and planned output over a period of time. While a load chart as a modified Gantt chart that

schedules capacity by work stations. Instead of listing activities on the vertical axis, load charts list either whole departments or specific resources. PERT network is a flowchart-like diagram that depicts the sequence of activities needed to complete a project and the time or costs associated with each activity.

5.0 SUMMARY

In this unit, we have:

- defined scheduling
- demonstrated the use of Gantt and load charts
- defined and discussed Gantt and load
- defined PERT network analysis and demonstrated the use of this tool for operational planning purpose.

6.0 TUTOR-MARKED ASSIGNMENT

i. Contrast a Gantt chart with a load chart.
ii. How would PERT be used as a planning tool?
iii. How would a manger construct and use a PERT network?

7.0 REFERENCES/ FURTHER READING

Fearon, H.E. et al. (1986). *Fundamentals of Production/Operations Management*. (3rd ed.). St. Paul, MN: West Publishing.

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UNIT 3 OPERATIONAL PLANNING TOOLS III

CONTENTS

1.0 INTRODUCTION

In the last unit, we discussed scheduling, PERT network analysis, Gantt and load charts. We also demonstrated the use of this tool for operational planning purpose.

In this unit, we shall discuss another set of tools available to managers for planning purposes, namely: breakeven analysis, linear programming, queuing theory and probability theory.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- define and discuss breakeven analysis
- define and describe linear programming
- explain queuing theory
- discuss probability theory.

3.0 MAIN CONTENT

3.1 Breakeven Analysis

Another important tool available to managers for planning purposes is the breakeven (BE) analyses. Inua (2011) defined breakeven analysis as the study of the relationship between costs, volume and profit at differing activity levels and can be a useful guide for short-term planning and decision-making. Similarly, Stiansen (1988) stated that breakeven analysis is widely used techniques for helping managers make profit projections. He defined breakeven analysis as a technique

for identifying the point at which total revenue is just sufficient to cover total costs.

Stiansen also stated that breakeven analysis is a simple formulation, yet it is valuable to managers because it points out the relationship between revenues, costs, and profits. To compute the breakeven point (BE), the manager needs to know the unit price of the product being sold (P), the variable cost per unit (VC), and total fixed cost (TFC).

As a manager of a corporation, when making decisions that affect the volume of output, you would classify costs as fixed or variable. You would want to know how such decisions would affect costs and revenues. You would also need to know that many factors in addition to the volume of output will affect costs. For instance, how many units of a product must an organisation sell to achieve breakeven – that is, to have neither profit nor loss? A manager might want to know the minimum number of units that must be sold to achieve her profit objective or whether a current product should continue to be sold or should be dropped from the organisation's product line.

An organisation breaks even when its total revenue is just enough to equal its total costs, but total cost has two parts, viz: a fixed component and a variable component. Fixed costs are expenses that do not change, regardless of volume. Examples include insurance premiums, rent, and property taxes. Fixed costs, of course, are fixed only in the short term because, in the long run, commitments terminate and could change as they are renegotiated. Variable costs change in proportion to output and include raw materials, labour costs and energy costs.

The breakeven point can thus be computed graphically or by using the following formula:

$$BE = \frac{TFC}{P - VC}$$

The formula tells us that:

(1) total revenue will equal total cost when we sell enough units at a price that covers all variable unit costs, and
(2) the difference between price and variable costs, when multiplied by the number of units sold, equals the fixed costs.

For instance, assuming that Kaura's Photocopying Service charges N0.10 per photocopy, if fixed costs are N27,000.00 a year and variable costs are N0.04 per copy, Kaura can compute his breakeven point as follows: N27,000 (N0.10 – N0.04); this is equal to 450,000 copies, or

when annual revenues are N45,000 (450,000 copies multiplied by N0.10). This same relationship is shown graphically in figure 3.1 below.

As a planning tool, breakeven analysis could help Kaura set his sales objective. For example, he could determine the profit he wants and then work backward to see what sales level is needed to reach that profit. Breakeven analysis could also tell Kaura how much volume has to increase to break even if he is currently running at a loss or how much volume he can afford to lose and still break even if he is currently operating profitably. In the management of some professional sports franchises, breakeven analysis has shown the volume of ticket sales required to cover all costs to be so unrealistically high that the best action for management is to get out of the business.

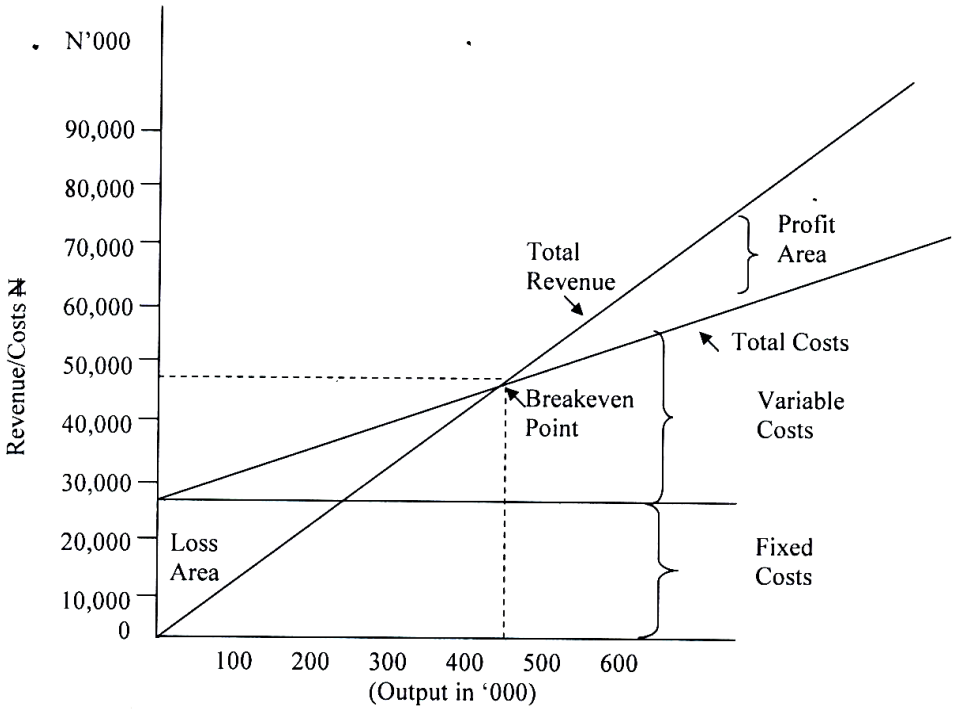

Fig. 3.1: Breakeven Analysis

Source: Stiansen, S. (1988). "*Breaking Even.*" *Success*, November, p. 16.

3.2 Linear Programming

Linear programming, according to Bamdt and Carvey (1982), is defined as a mathematical technique that solves resource allocation problems.

Dan Collier has a manufacturing plant that produces two kinds of cinnamon-scented home fragrance products: a woodchip-based

potpourri sold in bags and wax candles. Business is good. He can sell all of the cinnamon-scented products he can produce. This is his problem. Given that the bags of potpourri and the wax candles go through the same production departments, how many of each type should he manufacture to maximise his profits?

A close look at Dan's operation tells us that he can use a mathematical technique called linear programming to solve his resource allocation dilemma. As shown, linear programming is applicable to Dan's problem, but it cannot be applied to all resource allocation situations. Besides requiring limited resources and the objective of optimization, it requires that there be alternative ways of combining resources to produce a number of output mixes. There must also be a linear relationship between variables (Bamdt & Carvey, 1982), that is, a change in one variable must be accompanied by an exactly proportional change in the other. For Dan's business, that condition would be met if it took exactly twice the amount of raw materials and hours of labour to produce two of a given home fragrance product as it took to produce one.

What kinds of problems can be solved with linear programming? Some applications include selecting transportation routes that minimise shipping costs, allocating a limited advertising budget among various product brands, making the optimal assignment of personnel among projects, and determining how much of each product to make with a limited number of resources. Let us return to Dan's problem and see how linear programming could help solve it. Fortunately, Dan's problem is relatively simple, so we can solve it rather quickly. For complex linear programming problems, three are computer software programmes designed specifically to help develop optimising solutions.

First, we need to establish some facts about Dan's business. Dan has computed the profit margins on his home fragrance products at N10.00 for a bag of potpourri and N18 for a scented candle. These numbers establish the basis for Dan to be able to express his objective function as: maximum profit = N10P + N18S, where P is the number of bags of potpourri produced and S is the number of scented candles produced. The objective function is simply a mathematical equation that can predict the outcome of all proposed alternatives. In addition, Dan knows how much time each fragrance product must spend in each department and the monthly production capacity (1,200 hours in manufacturing and 900 hours in assembly) for the two departments (see table 3.1). The production capacity numbers act as constraints on his overall capacity. Now Dan can establish his constraints equations:

$SP + 4S \leq 1{,}200$
$SP + 2S \leq 900$

Of course, Dan can also state that $P \geq 0$ and $S \geq 0$, because neither fragrance product can be produced in a volume less than zero.

Dan has graphed his solution as shown in figure 3.2. The shaded area represents the options that do not exceed the capacity of either department. What does this mean? Well, let us look first at the manufacturing constraint line breakeven. We know that total manufacturing capacity is 1,200 hours, so if Dan decides to produce all potpourri bags, the maximum he can produce is 600 (1,200 hours ÷ 2 hours required to produce a bag of potpourri). If he decides to produce all scented candles, the maximum he can produce is 300 (1,200 hours ÷ 4 hours required to produce a scented candle). The other constraint Dan faces is that of assembly, shown by line DF. If Dan decides to produce all potpourri bags, the maximum he can assemble is 450 (900 hours production capacity ÷ two hours required to assemble). Likewise, if Dan decides to produce all scented candles, the maximum he can assemble is also 450 because the scented candles also take two hours to assemble. The constraints imposed by these capacity limits establish Dan's feasibility region. Dan's optimal resource allocation will be defined at one of the corners within this feasibility region. Point C provides the maximum profits within the constraints stated. How do we know? At point A, profits would be 0 (no production of either potpourri bags or scented candles). At point B, profits would be N5, 400 (300 scented candles x N18 profit and 0 potpourri bags produced = N5, 400). At point D, profits would be N4, 500 (450 potpourri bags x N10 profit and 0 scented candles produced = N4, 500). At point C, however, profits would be N5, 700 (150 scented candles produced x N18 profit and 300 potpourri bags produced x N10 profit = N5, 700).

Table 3.1: Production Data for Cinnamon-Scented Products

Department	**No. of Hours Required (per unit)**		**Monthly production Capacity (in hours**
	Potpourri Bags	**Scented Candles**	
Manufacturing	2	4	1,200
Assembly	2	2	900
Profit per unit	N10	N18	

Source: Bamdt, S.E. & Carvey, D.W. (1982). *Essentials of Operations Management*. Upper Saddle River, NJ: Prentice Hall.

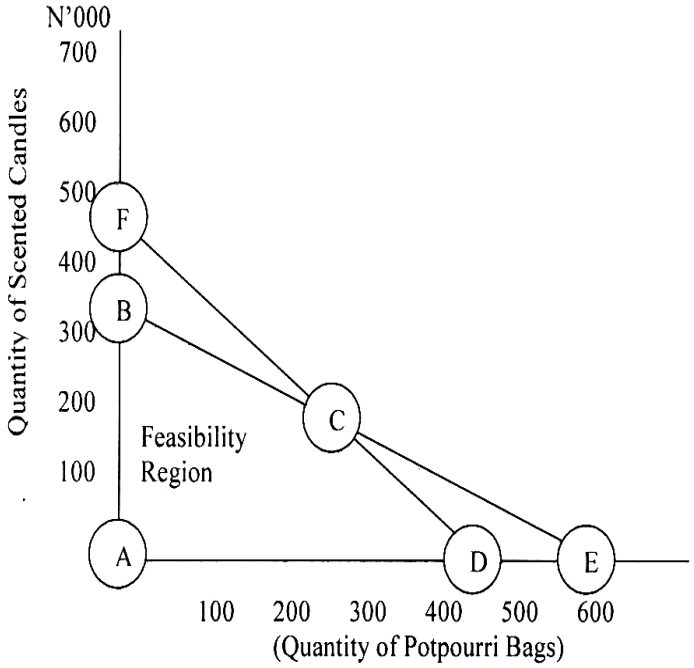

Fig. 3.2: Linear Programming

Source: Bamdt, S.E. & Carvey, D.W. (1982). *Essentials of Operations Management* .Upper Saddle River, NJ: Prentice Hall.

3.3 Queuing Theory

Adam and Ebert (1992) defined queuing theory as a technique that balances the cost of having a waiting line against the cost of service to maintain that line. Assuming you are a supervisor for the San Francisco Bay Bridge Toll Authority, and one of the decisions you have to make is how many of the 36 toll booths you should keep open at any given time. Queuing theory, or, as it is frequently called waiting-line theory, could help you solve this problem. Such common situations as determining how many gas pumps are needed at gas stations, tellers at bank windows, or check-in lines at airline ticket counters are examples. In each situation, managers want to minimise costs by having as few stations open as possible, yet not so few as to test the patience of customers. For instance, the outdoor products firm L.L. Bean developed a queuing model for handling customers' calls that resulted in a $10 million annual savings for the company because resources in its telemarketing programme were more effectively allocated. Looking back at our toll booth example, during rush hours you could open all 36 booths and keep waiting time to a minimum, or you could open only one, thereby minimising staffing costs, and risk a commuter riot.

Assuming that you are a bank supervisor and one of your responsibilities is assigning tellers, your bank branch has five teller

windows, but you want to know whether you can get by with only one window open during an average morning. You consider 12 minutes to be the longest you would expect any customer to wait patiently in line. If it takes four minutes, on average, to serve each customer, the line should not be longer than three deep (12 minutes ÷ 4 minutes per customer = 3 customers). If you know from the experience that during the morning, people arrive at the average rate of two per minute, you can calculate the probability (P) that the line will become longer than any number (*n*) of customers as follows:

$$P_n = \left[1 - \frac{\text{arrival rate}}{\text{service rate}}\right] \times \left[\frac{\text{arrival rate}}{\text{service rate}}\right]^n$$

In this case, *n* = 3 customers, *arrival rate* = 2 per minute, and *service rate* = 4 minutes per customer. Putting these numbers into the above formula generates the following:

$$P_3 = (1 - 2/4) \times (2/4)^3 = (½)(8/64) = 8/128$$
$$= 0.062$$

What does a P_3 of 0.0625 mean? It implies that the likelihood of having more than three customers in line during the morning is one chance in 16 (1/16 = 0.0625). Are you willing to have four or more customers in line six per cent of the time? If so, keeping one teller window open will be enough. If not, you will need to open additional windows and assign personnel to staff them.

3.4 Probability Theory

Adam and Ebert (1992) defined probability theory as the use of statistics to analyse past predictable patterns and to reduce risk in future plans. With the help of probability theory, managers can use statistics to reduce the amount of risk in plans. By analysing past predictable patterns, a manger can improve current and future decisions. It makes for more effective planning when, for example, the marketing manager at Porsche – North America, who is responsible for the 968-product line knows that the mean age of her customers is 35.5 years, with a standard deviation of 3.5. If she assumes a normal distribution of ages, the manager can use probability theory to calculate that 95 of every 100 customers are between 28.6 and 42.4 years of age (1.96 x standard deviation of 3.5 = 6.86; then 35.5 ± 6.96). If she was developing a new marketing programme, she could see this information to get available marketing dollars effectively.

4.0 CONCLUSION

From the discussion so far, we learnt that the breakeven point is the level of sales at which revenue equals expenses and net income is zero. Breakeven analysis represented in graphic form can be represented by the traditional approach.

Linear programming was defined as a mathematical technique that solves resource allocation problems. Queuing theory is another technique that balances the cost of having a waiting line against the cost of service to maintain that line. Finally, we defined probability theory as the use of statistics to analyse past predictable patterns and to reduce risk in future plans.

5.0 SUMMARY

In this unit, we have:

- defined and discussed breakeven analysis
- defined and described linear programming
- explained queuing theory
- discussed probability theory.

In the next unit, our discussion will focus on marginal analysis and project management.

6.0 TUTOR-MARKED ASSIGNMENT

i. What is the value of breakeven analysis as a planning tool?
ii. For what types of planning situations would linear programming be appropriate?
iii. Describe how the following are used in planning: queuing theory, probability theory and breakeven analysis.

7.0 REFERENCES/FURTHER READING

Adam, Jr. E.E. & Ebert, R.J. (1992). *Production and Operation Management.* (5th ed.). Upper Saddle River, NJ: Prentice Hall.

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UNIT 4 OPERATIONAL PLANNING TOOLS IV

CONTENTS

1.0 INTRODUCTION

In the last unit, our discussion focused on breakeven analysis, linear programming, queuing theory and probability theory. In this unit, we shall continue our discussion on operational planning tool.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- define and discuss breakeven analysis
- define and describe linear programming
- explain queuing theory
- discuss probability theory.

3.0 MAIN CONTENT

3.1 Marginal Analysis

Marginal analysis was defined by Russell and Taylor (1995) as a planning technique that assesses the incremental costs or revenues in a decision. The concept of marginal or incremental analysis helps decision makers optimise returns or minimise costs. Marginal analysis deals with the additional cost in a particular decision, rather than the average cost. For example, the commercial dry cleaner who wonders whether he should take on a new customer would consider not total revenue and total cost that would result after the order was taken, but rather what additional (marginal or incremental) revenue and costs would be generated by this particular order. If the incremental revenues exceeded the incremental costs, total profits would be increased by accepting the order. Managers also use marginal analysis for

determining whether to add new product features. For instance, before Volvo (brand of a car) decided to install its multilink suspension system, supplemental restraint system, and antilock braking system on its cars, managers first analysed the marginal costs and revenues generated by those production additions.

3.2 Simulation

Simulation can be defined as a model of a real-world phenomenon that contains one or more variables that can be manipulated in order to assess their impact (Russell & Taylor, 1995).

Managers are increasingly turning to simulation as a means for trying out various planning options. Simulation can deal with problems addressed by linear programming, but it can also deal with more complex situations.

How might a manager use simulation? Managers at the pharmaceutical manufacturer, Merck used simulation as they considered acquiring Medco, a mail-order pharmacy company, for $6.6 billion. The problem Merck's managers wanted to simulate was how the company would perform in the future, with and without Medco. Managers in the finance department built a model with a vast number of variables including, among other things, information about US healthcare system and healthcare reform possibilities, profit-margins, possible future changes in the mix of generic and brand-name drugs, and how the company's competitors might react to the merger. With the number of variables involved in this complex model, a simulation was used to change the variables at random and to test to see how the proposed merger would perform under different business and economic scenarios. The numerous simulations helped Merck managers decide that the Medco acquisition made sense, and they proceeded with their acquisition plan.

3.3 Project Management

Russell and Taylor (1995) defined a project as a one-time-only set of activities that has a definite beginning and ending point in time. They also defined project management as the task of getting a project's activities done on time, within budget, and according to specifications.

Different types of organisations, ranging from manufacturers such as Ford Motor Company to software design firms such as Purple Moon Company, perform their activities using projects. In this section, we briefly describe project management and why it has become so popular in recent years. We include project management as a planning tool and

technique because it can help managers establish objectives and outline work activities.

Project management is popular in modern organisation because, its approach fits into a dynamic environment, the need for flexibility and rapid response. Organisations are increasingly undertaking projects that are somewhat unusual or are unique, have specific deadlines, contain complex interrelated tasks requiring specialised skills, and are temporary in nature. These types of projects do not fit nicely and neatly in the standardised planning and operating procedures that guide an organisation's other routine and ongoing work activities.

The 2nd African Council of Distance Education Conference hosted by the National Open University of Nigeria (NOUN) in July, 2008 is an example of a project. A planning committee was set up by the management of the university to mobilise human and material resources as well as funds separately for this project and successful hosting of this conference. At the end of the conference, the planning committee was dissolved and members of staff who participated in the project assignment returned to their respective units, sections, schools, directorates and departments. In this typical example, the work was done by a project team whose members are temporarily assigned to the project. These members in turn report to a project manager. The project manager coordinates the project's activities and often reports directly to an upper-level manager. It should borne in mind however that the project is temporary. A project team exists only long enough to complete its specific objectives. After a while, it disbands, and members move on to other projects, return to their permanent usual duty, or leave the organisation.

The essential features of the project planning process are shown in figure 4.1. The planning process begins by clearly defining the project's objectives. This step is necessary because the manager and the team members need to know what is expected of them. All activities in the project and the resources (labour and materials) needed to accomplish them must then be identified. This step may be time consuming and complex, particularly if the project is unique and there is none of the history or experience that typically exists in planning tasks.

Once the activities have been identified, their sequential relationship needs to be determined. For instance, what activities must be completed before others can begin? Which can be undertaken simultaneously? This step typically is done using flow chart-type diagrams.

Next, the project activities need to be scheduled. The manager estimates the time required for each activity and then uses these estimates to

develop an overall project schedule and completion date. Then the project schedule is compared with the objectives, and any necessary adjustments are made. If the project time schedule is too long, the manager might assign more resources to critical activities so they can be completed faster. The project manager may choose to use any of the scheduling techniques that we described earlier such as Gantt chart, a load chart, or a PERT network.

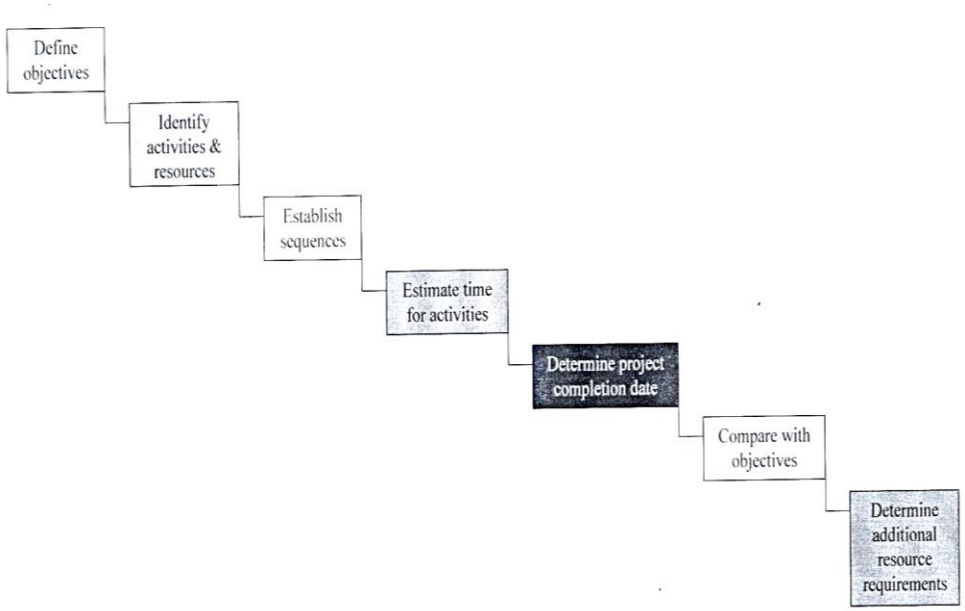

Fig. 4.1: Project Planning Process

Source: Russell, R.S. & Taylor, B.W. III (1995). *Production and Operations Management.* Upper Saddle River, NJ: Prentice Hall.

4.0 CONCLUSION

We note from the unit that marginal analysis deals with the additional cost in a particular decision, rather than the average cost. It was also noted that managers are increasingly turning to simulation as a means for trying out various planning options. Simulation can deal with problems addressed by linear programming, but it can also deal with more complex situations.

Finally, we note that a project is a one-time-only set of activities that has a definite beginning and ending point in time while project management is the task of getting project activities done on time, within budget, and according to specifications.

5.0 SUMMARY

In this unit, we have:

- defined and discussed breakeven analysis
- defined and described linear programming
- explained queuing theory
- discussed probability theory.

6.0 TUTOR-MARKED ASSIGNMENT

i. What is a project and what do you understand by the concept 'project management'?
ii. What explains the growing popularity of project management?

iii. Compare simulation with marginal analysis.

7.0 REFERENCES/FURTHER READING

Russell, R.S. & Taylor, B.W. III (1995). *Production and Operations Management.* Upper Saddle River, NJ: Prentice Hall.

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MODULE 4 CASE STUDIES/APPLICATIONS

UNIT 1 FOUNDATIONS OF PLANNING

(1) I CAN SEE CLEARLY NOW

According to Kathleen Cote, Chief Executive Officer of Computervision Corporation of Bedford, Massachusetts "The most important thing for any organisation is to have everyone focused on the same objectives and to have the objectives clearly defined." Computervision Corporation http://www.cv.com is a leading supplier of desktop and enterprise-wide product design and development software and services. Its vision is to be the partner of choice for the most important thing its customers do – product development. The company pioneered CAD/CAM (computer-aided design/computer-aided manufacturing) hardware and software back in 1971 and was flying high during the 1980s as revenues and profits soared. Then, the once-profitable company posted losses of nearly $1.3 billion from 1991 through 1993. Cote headed the operating committee that developed the strategic plan for Computervision's turnaround and ultimate survival. Her work in that area led to her being named president and chief operating officer of the company in December, 1995 and being named to the top management job in June, 1996.

Cote's management style happens to be very people oriented, and she knew how she wanted to run the company. What the company had to do to become successful again and what she had to do as CEO to make that happen were crystal-clear in her mind: The Company had to clearly define its objectives, and then she had to make sure that everyone was focused on those objectives. Cote stated, "The top three things I am working on have to be the top three things everyone is working on. We are only going to be successful together". How did she go about making that happen?

The first thing Cote did was to have her senior managers identify where Computervision was winning business and where it was losing business. On the basis of that analysis, they decided to shift the company's focus to providing product development solutions through software and services and putting less of an emphasis on hardware. The top managers then established corporate objectives and communicated them down through the organisation. Those objectives were then used to clearly

define individual performance objectives. In addition, Cote was firmly committed to sticking to the objectives. She said, "I'm a firm believer that if you stay on course and never get off, you will have great success. There really is no surprise if you have a plan in place."

Cote is not just focused on establishing and communicating common objectives for organisational employees. She also is strongly committed to making sure objectives are met. Managers (and all organisational employees) are held accountable for meeting their respective objectives and doing what they say they are going to do. Says Cote, "I don't like surprises. If something isn't going right, let me know what you can do about it to work through the issues and the problem". According to Cote, achieving the objectives entails showing employees how they are a part of making the plans happen and making them feel that they play an important role in helping the company meet its goals.

How has Computervision performed under Cote's leadership? The company posted a net income of $9.8 million in 1994, a profit of $22.8 million in 1995, and a profit of $26 million in the first three quarters of 1996, but it did suffer a loss of $5.9 million in the fourth quarter of 1996. That loss abruptly ended the company's string of 11 consecutive profitable quarters. But, despite the unexpected fourth-quarter loss, industry and financial analysis expect Computervision to continue its history of solid profits.

Questions:

What is your reaction to Cote's philosophy that the most important thing for any organisation is to have everyone focused on the same objectives and to have the objectives clearly defined? Do you agree? Why or why not? What would be the drawbacks of such a philosophy?

What role did strategic plans play in Computervision's turnaround? What role should they play in the company's future? What role should operational plans play?

(2) BEHIND-THE-SCHENE PLANNING OF THE FIRST LUNAR LANDING

"Houston, Tranquility Base here. The *Eagle* has landed". Even now, more than 30 years later, these words stir people's imagination. For those who watched the first lunar landing on July 20, 1969, they are forever frozen in memory. Yet, what went on behind the scenes of that feat makes its successful accomplishment seem even more incredible! What looked like a smooth-sailing operation that worked perfectly and according to plan came dangerously close to disaster.

To put three astronauts in the depths of outer space and then to have two of them take a spacecraft and land it on the moon involved an unbelievable amount of detailed planning. From the countdown to the liftoff of the enormously powerful *Saturn V* rocket to the delicate maneuvering of the lunar spacecraft, each detail had been meticulously planned. Or so the technicians and controllers thought!

The first sign of something amiss was when Neil Armstrong and Buzz Aldrin began the descent toward the lunar surface in the tiny and extremely fragile *Eagle* spacecraft. An alarm – soething called the 1202 ("twelve-oh-two") – went off. The person monitoring the descent of the *Eagle* from back on Earth in Mission Control recalls, "I didn't have the foggiest idea of what "1202" was." There was less than eight minutes to landing on the surface of the moon, and the only person at Mission Control who seemed to know what this 1202 alarm meant was Steve Bales, a 26-year-old technician. For what seemed like an eternity, the entire space programme waited to see if Bales would call off the moon landing. Bales finally determined that the problem simply was that the on-board computer had too much to process, but as long as it did not shut down completely, they could still make a safe moon landing. The *Eagle* was given a "go" for landing despite the alarm.

The next problem arose when the *Eagle* was 5,000 feet off the surface of the moon and moving down at 100 feet a second. The computer swung the spacecraft into position for descent, but when Neil Armstrong looked out from the window of the *Eagle*, he saw nothing he recognised from his earlier studies of the moon's surface. The computer guidance system was taking them right into boulder field – not at all what had been planned. The delicate lunar lander could not survive landing on rocks the size of Volkswagen. At 350 feet above the surface, Neil Armstrong, without saying a word to Mission Control in Houston, started to fly the spacecraft manually, searching for someplace to land. The engineers and technicians in Mission Control sat by helplessly, absolutely unable to offer any assistance. As Armstrong got closer and closer to the surface, all he could still see was larger boulders.

Meanwhile, in Houston, the computers showed that the *Eagle's* landing tank was running dangerously low on fuel. One of the individuals in Mission Control that day recalls, "From then on, there was nothing we could do to help the crew. All we could do was let them know how much fuel they had left." The decision was made by Mission Control that if the *Eagle* did not land within the next 60 seconds, the mission would be aborted. At 25 seconds, then 20 seconds, Armstrong was still 100 feet off the moon's surface, but he had found a spot that looked safe for landing *if* he could get there in time. The silence at this point in the Mission Control room was deafening. Then the very calm, cool, and

collected voice of Neil Armstrong came across the communication system: "Houston, Tranquility Base here. The *Eagle* has landed" and the rest of the story is history!

Questions:

1. What role would specific plans play in planning the lunar landing mission? What role would directional plans play?
2. Do you see any evidences of contingency planning in the description of this situation? Explain.
3. What do you think the stated objectives of the lunar landing space mission might have been? How about the real objectives?

Source:

Based on "One Giant Leap", ABC News Day One, aired July 11, 1994.

UNIT 2 DECISION MAKING

(1) NICE PANTS

Levi Strauss http://www.levi.com is a corporate icon in the fashion industry. The privately held company with sales revenues of over $6.7 billion has led many a fashion trend – from the very first blue jeans back in the mid-1800s to the introduction in 1986 of a line of casual pants called Dockers. The Dockers brand was in the right place at the right time as the corporate world began shifting to more casual dressing. This casual trend led to Dockers' becoming a billion dollar brand. In August of 1995, Levi Strauss rolled out a new line of men's dress pants called Slates. The new pants line reflected another attempt by the company to capture a piece of the dress-pants market. Levi Strauss had previously entered this market with a line called Dress Dockers, a more sophisticated version of its very popular casual Dockers. Sales of this dressy line never took off, and it was finally discontinued. But Levi's decision makers believed that building upon the Levi Strauss name and image with a line of dress pants was important to the company's future growth and performance. And, even more important, they felt that successfully developing and marketing such a line of pants was achievable; they wanted to prove to themselves that they could compete in this market as well! Getting to this point took enormous attention to details and an incredible amount of decision making. What were some of the decisions that had to be made?

One of the first decisions, Levi's managers had to make was whether the pants line would be a separate and totally new line – only the third in the company's history (Levi's and Dockers being the other two). Once they made the decision that yes, indeed, this new line would be separate from its other two lines; a name had to be chosen for the line. The new division's marketing team spent four months going through 10,000 possible names looking for one that could be trademarked globally and that could be pronounced in most languages. In addition, they wanted a name that was somewhat masculine and also a name that ended in s because the other two brand names (Levi's and Dockers (ended in s. After selecting the name Slates, the decision makers wanted to keep it as ceded to "test" the name by inserting the Slates name into sample news articles to evaluate how it would look in print. But these "clandestine" marketing actions became irrelevant when the decision makers learned that Microsoft was preparing to launch an on-line magazine called – wouldn't you know it – *Slate*. It was too late to choose a different name, so the managers concluded that they could trademark the name *Slates* only against use by other apparel makers, which is what they did.

With the name decision out of the way, it was time to select a logo. One initial design was a chiseled rock, which the managers eventually decided wouldn't work because they didn't want to give men the impression that the pants came only in the colour gray. The final design chosen was a sleek interwoven capital *S*. Then a decision had to be made about where the logo would be placed. After several months of deliberation, the managers decided that the best place was on the inside waisthand above the zipper so that it would be the last thing a man saw as he put on his pants.

The next decision had to do with the actual design of the Slates pants. Based on market research, one design consideration was to have deeper pockets than those on similar pants and to have both back pockets with buttons to accommodate left-handed, as well as right-handed, males. Then the design decision turned to the belt loops. The managers debated about how many, how far apart, and how thick the belt loops should be. They ultimately decided on seven belt loops, four and a half inches apart and three-eighths inch wide. Market research also steered the decision to add sizes with odd waist measurements (that is, 31, 33, 35, and so on).

Then, it was on to production decisions. After production had already began on the new pants and just a few months before the shipping deadline, managers halted production to change the fabric content of half the product line. The wool content was increased by 10 percent. Why? The managers said it was because they found out that they could use better fabric without increasing the price of the pants. However, the change led to immediate production issues that had to be addressed. Production workers were getting ready to go on Christmas vacation, retailers had already placed orders based on the original fabrics, patterns no longer met specifications, dye colour were off, and to top it all off – the factories needed fabric right now to keep up production levels, and changing the fabric meant waiting for the new fabric to be delivered. Each of these issues required a series of decisions.

Decisions about marketing the new pants line also had to be made. The Slates marketing team wanted the pants to stand out in stores. They hired an architectural firm that specialised in designing luxury hotels to design a roomy, circular display. Also, the managers wanted a new hanger – something that would display the product in a unique fashion. Unfortunately, one design required too much effort to assemble; another one hid the logo; and another crumpled the pants. So the decision was made to go back to the tried-and-true approach – hangers similar to what had always been used in displaying pants. Other decisions revolved around the design of an appropriate promotion programme for the new pants line.

Although little information has been released about the success of the Slates line, the story of the development process provides a good description of the managerial decisions that had to be made in several organisational areas as the new product line was launched.

Questions:

1. What types of problems and decisions do you see managers dealing with in this story? Explain your choices.
2. How might each of the following be used in the decisions that had to be made in developing this new pants line:
   (a) perfectly rational decision making,
   (b) bounded rational decision making; and
   (c) intuition.
3. Would you characterise the decision conditions surrounding the development of the Slates pants line as certainty, risk, or uncertainty? Explain your choice.
4. Which decision-making style might be most appropriate for each of the following decisions about the new pants line:
   (a) Should the new pants line be a separate and totally new line?
   (b) What should be the name of the new pants line?
   (c) What should the design of the new pants line include?

Explain your choice for each decision.

(2) GRACE UNDER FIRE

You probably would not know quite what to expect from a business named Pyro Media, but you would figure it was going to be something pretty unusual. Grace Tsjuikawa Boyd's business, Pyro Media, has pursued a pretty unusual direction, but the decision to do something different was not made randomly.

Boyd's Pyro Media started off as a manufacturer of huge ceramic glazed pots such as the ones you might see holding trees or plants in the lobbies of big hotels. Using her degree in art, Boyd herself initially made the high-quality glazed pots, which sold for about $1,500 each. As her business grew to the point at which it had backorders of eight to 12 weeks, Boyd decided it was time to move to a bigger facility and invest in equipment and employees. She says, "We were in business making money and assumed that business was going to grow at the same rate it had been". Grace soon found, however, that Pyro Media's revenues didn't keep increasing by 30 per cent as they had been, but instead were dropping off. Upon investigating the situation, Boyd found out that

huge corporations had begun importing and distributing terracotta planters, essentially stealing away her business.

Boyd knew that she had to do something. She had this equipment, this 56,000-square-foot facility, and employees who knew ceramics. She called in some consultants to see what other markets her business might pursue. Their study, which took about six months, recommended that Pyro media look into high-tech ceramic applications: in other words, using the same technology that Boyd had developed and used in making ceramic pots and applying it to a new area. On the basis of that information, Boyd hired a ceramics engineer and went after the ceramics "castables" market. The company's decision to move into this new market has been so successful that the one engineer has since been joined by seven others!

Recognising that business was falling off and analysing the reason behind the loss of revenue was instrumental in Pyro Media's continued success. Boyd says that being able to recognize a problem is critical, especially for small businesses. Why? Because small businesses have no money to waste and no time to waste. If problems are ignored and not analysed, the business might face quick failure.

Questions:

1. A decision to move into a new market as Boyd's Pyro Media did is a major decision. How could Boyd have used the decision-making process ot help her make this decision?
2. Would you call declining revenues a problem or a symptom of a problem? Why?
3. Using figure 2.1, identify the type of decision-making style you think Boyd exhibits. Explain your choice.
4. Do you agree with Boyd's assertion that being able to recognize a problem is critical, especially for small businesses? Why or why not?

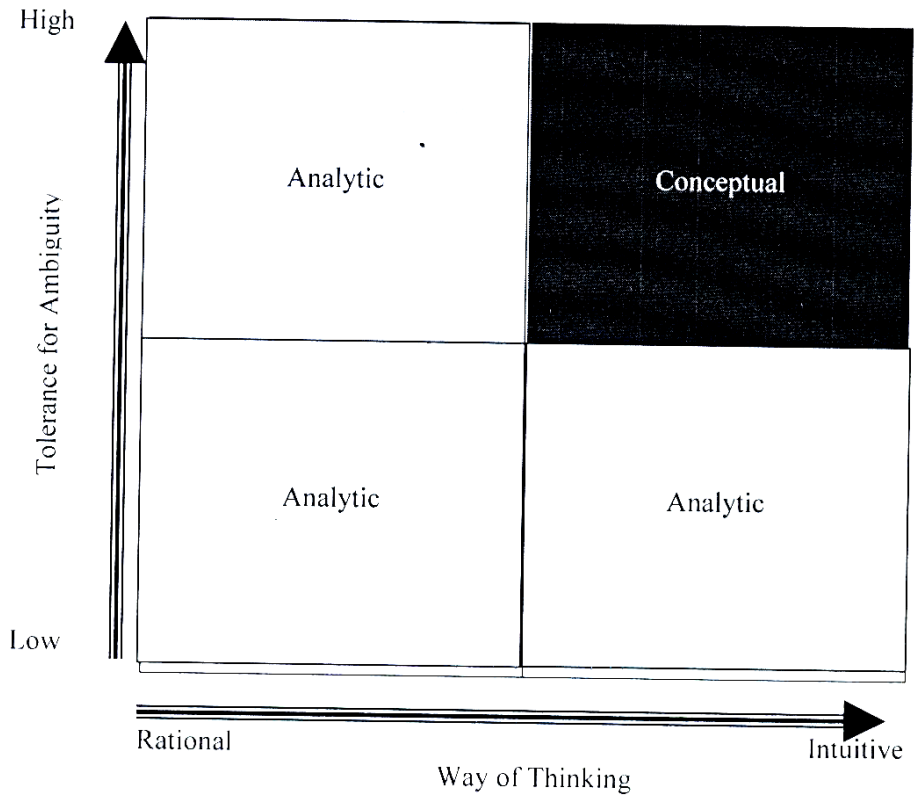

Fig. 2.1: Decision-Making Styles

Source: Based on Small Business 2000, Show, 108.

UNIT 3 PLANNING TOOLS AND TECHNIQUES

(1) MANAGING CHAOS

Oticon Holding A.S, a company that makes hearing aids, is hardly the type of business in which you would expect to find radical approaches to managing. The Danish manufacturer, founded in 1905, was once an ultra traditional, hierarchical, and conservative, by-the-book organisation. One day, Oticon's executives realised that the marketplace had changed, technology had changed, and they were now competing with the likes of Sony, Siemens, and Philips, large and successful global corporations. Lars Kolind, CEO knew that in order for his company to survive and ever have a chance of being a strong, viable industry competitor, he would have to take drastic measures.

Kolind recreated Oticon into what he calls the "ultimate flexible organisation". At precisely 8 a.m. on August 8, 1991, the company's revolutionary dis-organisation was born. What exactly happened that day that totally transformed the company? To begin with, all organisational departments and employee job titles disappeared. Instead, all work activities became project based and was implemented by informal groupings of interested individuals. Employees "jobs" were reconfigured into unique and fluid combinations of work activities that fit each employee's own specific capabilities and needs. Today, project teams form, disband, and form again as the work requires. Project "leaders" are basically anyone in the company with a good idea who is willing to pursue it. Project leaders compete to attract whatever resources and people they need to complete the project. Project "owners", numbers of Oticon's 10-person management team, provide advice and support, but they make few actual decisions.

Even the company's offices facilitate (and support) this seemingly chaotic free flow of work. All physical barriers and surroundings in the company's offices were eliminated and replaced by open spaces filled with uniform work stations on wheels that held a computer and a desk with no drawers. Individuals randomly selected desks and wheeled them together to form project work teams. Informal communication among employees replaced memos as the accepted form of communication. Coffee bars located throughout the company's headquarters building are perfect for informal, stand-up meetings. Large and small "dialogue rooms" with circular sofas and a tiny table are also scattered throughout the facility.

This type of radical transformation did encounter employee resistance at first; Kolind overcame most resistance by involving employees in the process. He recruited small teams to tackle such projects designing the

tremendous electronic infrastructure that would replace the traditional reliance on pen and paper, and he put other project teams to work finding an appropriate building site and working with an architect to design the facilities.

What kind of performance has resulted from the "new" Oticon? One immediate result was the discovery that the company had already invented the first fully automatic hearing aid in the mid-1980s, but it had never made it to the market because of lack of communication between departments. Company teams immediately realised the potential of this technological breakthrough and acted quickly to introduce this new type of hearing aid. Also, Kolind estimates that there are, at any one time, approximately 100 projects of various magnitudes in progress. He feels strongly that the company can respond quickly to any opportunities that emerge anywhere around the globe. In fact, Kolind says, "There's a paradox here. We are developing products twice as fast as anybody else. But when you look around, you see a very relaxed atmosphere. We're not fast on the surface; we are fast underneath."

The "ultimate flexible organisation" that Lars Kolind designed is well poised to adapt to any environmental and competitive challenges sent its way. As a saying on one of the Greek-style columns found in the facility so boldly displays, "think the unthinkable." That is exactly what this Danish company has done.

Questions:

1. Given the unusual ways in which work is done in Oticon, what planning tools and techniques might be useful? Explain your choices.
2. Suppose that some organisations wanted to use Oticon as a benchmark. What types of things might it learn from Oticon?
3. Compare Oticon's approach to project management with what was described in Unit 4 Module 3. What similarities do you see? What differences? Is one approach better than the other? Explain.

(2) SUCCESSFULLY SELLING BAGELS – IN JAPAN

By anyone's count, 182,600 bagels a week is a lot of bagels! What is even more surprising is that that is the number currently being sold in Japan by Jerry Shapiro's company; Petrofsky's Bagels, and he predicts that sales are about to double and perhaps triple. You might not have thought there was a market in Japan for that distinct bagel taste, but Japanese consumers obviously have developed a fondness for Petrofsky's bagels.

Jerry Shapiro has been described as a modern-day explorer. It is probably fitting that Shapiro's business is based in St. Louis, Missouri, because that city was jumping-off point for many explorers preparing to survey the western United States. Shapiro's vision, though, was more international; he believed that there was a strong potential market for his bagels in Japan. Although having a vision is important, it takes more than a vision to be successful. It takes putting the vision into action.

How did Shapiro pursue his vision? How did he get the Japanese initially to try his bagels and then get them to continue buying them? He says that getting past that initial hurdle involved several things. First and foremost was a significant amount of taste testing. Although this step was time consuming and tedious, he knew he was on the right track when a couple of elderly Japanese professors who tasted Petrofsky's bagels said the bread dough reminded them of something sweet that they had eaten when they were younger. Shapiro also says that getting his product into Japan involved several trips to that country and finding the proper trading partner. He could not anticipate the trends and needs of the Japanese market by sitting in his office in St. Louis. Instead Shapiro had to experience the unique characteristics of the Japanese market firsthand and had to develop a strong, long-term relationship with his company's trading partner. Although the amount of preparation and planning to get into the Japanese market may have seemed overwhelming at times, Shapiro was committed to pursuing his strategy no matter how long it took.

Having successfully implemented his vision, Shapiro gives the following advice for going into international markets: Put your plan in writing. Solicit customer participation. And finally, be prepared to do whatever it takes to build long-term relationships.

Questions:

1. How could environmental scanning, particularly global scanning, have been used by Jerry Shapiro? What could scanning have shown him?

2. What other planning tools might Shapiro find necessary as he continues to do business globally? Be specific.
3. What implications do you see for managers and how they plan from the advice Shapiro gives for going into international markets?

Source: Based on Small Business Today, Show 104.