

## **"The Management Theory Jungle"-- Resolved**

**Prof. Muhammad Azhar Ikram Ahmad**

### **Introduction to Management Theory Jungle**

Management as a separate discipline of study emerged on the horizon of knowledge at the beginning of twentieth century. Today when we study 100 years history of evolution of management thought, we come across a variety of management thoughts with quite different focal points and explanations of management. Some authors call the same set of thoughts as "theories of management"; some other label them "management schools of thought", some authors give them the title as "approaches to management" and there are still others who call them as "approaches to management theory". The reader finds himself in a bewildering state of mind. The confusion is created on two accounts. *Firstly*, the reader starts thinking that the terms theory, school of thought, approach, and approach to the theory of a subject as synonymous. The general vocabulary does not support this assumption. **Theory** means a set of generalizations to explain and/or predict a phenomenon in a field of inquiry e.g. hierarchy of need theory, theory of multiplier, theory of planetary motion etc. **School of thought** means a group of scholars sharing the same view e.g. Catholic or Protestant schools. **Approach** means the way or the method adopted to solve a particular problem e.g. the communist or capitalist approach to economy. Finally **approach to the theory of a subject** means the way, the order or the method to organize the literature of the subject. It is for this inexactness of these terms to describe the set of thought constituting evolution of management or for the lack of a better term that some authors have called these thoughts as "perspectives" or "viewpoints". The *other reason* that creates

confusion is that most of these theories/approaches/schools of thought etc. explain only a part or some parts of the whole discipline that we refer to today as management. In the words of Flippo and Musinger:

“Most of the so called theories seem to be the explanation of an elephant by a group of blind men”<sup>(1)</sup>

For example, the Management Science Approach (The Mathematical School) regards management as a system of mathematical models and processes and argue that being a logical process management can be expressed in terms of mathematical symbols and relationships. No doubt mathematics has invaluable contribution in any field of inquiry but we cannot regard mathematics a separate school of management theory any more than it is a separate school in Physics, Chemistry, Engineering and Medicine. The Decision Theory (Decisional Management School) concentrates on rational decision making. To equate management with the science of decision making is nothing more than a keyhole look at the central area of management. Same is the case with Behavioural Approach or School that interprets management as the science and art of interpersonal relations. We cannot overemphasise the importance of good leadership for good managership but does managing means leading? Similarly, I doubt whether the Contingency Theory or Approach can be truly regarded as separate theory because the importance of recognizing and adjusting to situational variables and environmental factors is already an important principle whether it be the Administrative Process Viewpoint or the Behavioural Viewpoint or the Systems Viewpoint.

### **Why the Jungle Exists?**

We shall discuss the various viewpoints later on. Presently the point is *why is there such wide divergence* in the different viewpoints to the same discipline called Management? The *root cause* lies in the fact that Management is an *interdisciplinary subject*. Individuals from many different academic and professional

areas --- including History, Psychology, Sociology, Cultural Anthropology, Philosophy, Political Science, Engineering, Mathematics, Statistics, Economics, Logistics, Computer Science -- have, at one time or another been interested in Management. Each group of scholars and practitioners has interpreted management according to its own perspective. With each new perspective have come new questions and assumptions, new research techniques, different technical jargons and new conceptual frameworks.<sup>(2)</sup>

Harold Koontz, a renowned management scholar, took notice of this wide divergence in the approaches/theories of Management in 1961 and coined the term "*Management Theory Jungle*". He detected six different approaches to explain the nature and knowledge of management and remarked:

*"What is rather upsetting to the practitioners and observers is that the variety of approaches to management theory has led to a kind of destructive jungle welfare"*<sup>(3)</sup>

He further remarked that it is important to take steps to disentangle the Management Theory Jungle. At that time, the intelligentsia of the subject was optimistic that it will take not more than ten years for the emergence of a generally accepted theory of Management<sup>(4)</sup>. But twenty years later Harold Koontz wrote another article and unfortunately remarked:

*"The jungle still exists, and there are nearly double the approaches to management that were identified nearly two decades ago. At the present time, a total of eleven approaches to the study of Management may be identified"*<sup>(5)</sup>.

To the eleven approaches pointed out by Koontz at least two more approaches, which have gained popularity during the recent years may be added i.e. *Theory Z* and "*Attributes of Excellence*".

Is such heavy growth in the Management Theory Jungle really "destructive jungle warfare" as Koontz had remarked? A study of all these viewpoints to Management does not conclusively support this opinion of the learned scholar. Although these viewpoints evolved in historical sequence but later ideas have not replaced the earlier ones. What has happened is that each new approach has added to the knowledge of previous ones. At the same time each new approach has continued to develop on its own<sup>(6)</sup>. Moreover, while each school retains its special focus, each tends to borrow insights and concepts from the others. Indeed, it often seems that boundaries between various schools are becoming progressively blurred<sup>(7)</sup>. This disappearance of the clear boundaries between each approach to Management Theory can be regarded as a leap toward the achievement of a universally accepted approach to management theory.

In fact the early approaches to management theory were developed by the practitioners of management, each having different perspective and different focal point. The contribution of academicians and scholars of management towards the literature of management was not significant till the early 1950s. The task of providing sound foundation and infallible structural framework to a subject primarily rests with the academicians and scholars. Therefore, as the quantum of the literature developed by academicians is increasing, we are getting closer to the goal of a universally accepted approach to management theory.

### **Disentanglement from the Jungle**

A study of contemporary textbooks of management clearly points out the current trend of convergence around the Management Process Approach to management theory. Since functions of management --- planning, organizing, staffing, directing and controlling --- are basic and present in every managerial situation, the Management Process School provides an excellent framework to the study of management. This framework has the capability to assimilate the valuable contributions offered by other schools of management. However, it is recommended to

call it as Modified Management Process Approach to Management Theory<sup>(8)</sup> because the list of functions of managers as given here is somewhat different from the list originally given by Henry Fayol.

In the following lines we shall examine in chronological order, the various management thoughts and analyze how these thoughts can be assimilated into a single approach to management theory using the modified management process framework as the central core.

### **The Scientific Management Viewpoint:**

The Scientific Management was a natural outgrowth of Industrial Revolution<sup>(9)</sup>. In United States especially, skilled labour was in short supply at the beginning of twentieth century. The only way to increase the output was to increase the efficiency of workers. **Fredrick W. Taylor** (1856-1915) typically known as **father of scientific management**, observed systematic soldiering on the part of workers and ignorance as to efficient organization of work on the part of management. Taylor's basic theme was that managers should study the work scientifically to identify the "one best way" to get the job done. He relentlessly pursued the idea that efficiency at work could be improved through careful and scientific analysis<sup>(10)</sup>. He also called for a "mental revolution" to fuse the interests of labour and management into a mutually rewarding whole. Both in his testimony and in his two books "Shop Management" and "The Principles of Scientific Management", Taylor outlined his philosophy. It rested, he said, on four basic principles:

1. The development of a true science of management, so that *the best method for performing* each task should be determined.
2. The *scientific selection* of workers, so that each worker should be given responsibility for the task for which he or she was best suited.
3. *Scientific education and development* of workers.



4. Intimate, friendly cooperation between management and labour<sup>(11)</sup>.

**Henry L. Gantt** (1861-1919) was one of the associates of Taylor and a prominent contributor to Scientific Management. His most significant contribution was the *scheduling chart*, today known as **Gantt Chart**. It is a *graphic method* of describing planned and actual production, thereby making possible better managerial control over production.

**Frank Gilbreth** (1868-1924) another advocate of and contributor to Scientific Management is known as the **Father of Motion Study**. His motion study methods made the discovery of "the one best method of performing a job" truly scientific.

**Lillian Gilbreth** (1878-1972) the fourth important contributor to Scientific Management pioneered in the field we call "**Personnel Management**"<sup>(12)</sup>. Her contribution is towards scientific selection, placement and training of personnel.

The innovative ideas that Taylor popularized are in use today. Modern assembly line pours out finished products faster than Taylor could ever have imagined. This production miracle is just one of the legacies of Scientific Management. However, Scientific Management thought is more occupied with productivity at shop level<sup>(13)</sup>.

The four principles of Scientific Management as described by Taylor come within the ambit of *organizing, staffing and directing*. The Gantt Chart relates to *planning and control*. Motion study invented by Frank Gilbreth is a device for efficient *organization* of production activity and the work of Lillian Gilbreth relates to *staffing* function. Although the Scientific Management takes into account all the functions of management as described in Modified Management Process Approach, but management is much more than production management. Moreover, management is not related to business organizations only. Organizations other than business like government, military,

political, religious, philanthropic etc. all require managers and management.

Fredrick W. Taylor and his lieutenants did not develop a systematic body of knowledge inspite of significant contribution they made to management. A major reason is that they lacked an adequate conceptual framework. The solution came from Henri Fayol in the form of Management Process Approach to management theory<sup>(14)</sup>.

### **The Management Process Approach:**

At the same time when Taylor was busy in improving productive efficiency of factory workers, a French mining engineer Henri Fayol (1841-1925) was making a great contribution to the science and art of management in Europe. It was the time when many small single product companies were expanding into large multi product organizations. While efficiency of production was certainly of great importance, of equal or greater concern were issues related to management of total organization. Organizations and management of organizations had become much more complex than could be handled by the Scientific Management principles<sup>(15)</sup>.

An answer to this problem came from Henry Fayol. In 1916 he published his book "Administration Industrielle et Generale". However, his thought did not become widely known in America and Britain until an English translation become widely available in 1949. Fayol divided business operations into six activities i.e. (1) Technical – producing and manufacturing products; (2) Commercial – buying raw materials and selling products; (3) Financial – acquiring and using capital; (4) Security – protecting employees and property; (5) Accounting and (6) Managerial. He *focused* on the managerial aspect. His approach is based on *two assumptions*. *First*, although the purpose of an organization may vary, e.g. business, education, religion, government etc., but there is a core management process which remains the same across all organizations. *Second*, that the management process can be reduced to a set of separate functions

and related principles. He described the managerial functions as: (1) Planning (2) Organizing, (3) Commanding; (4) Coordinating and (5) Controlling. He outlined a list of *principles of management* as: (1) Division of work; (2) Authority and responsibility; (3) Discipline; (4) Unity of command; (5) Unity of direction; (6) Subordination of individual to general interest; (7) Fair remuneration; (8) Centralization; (9) Scalar chain; (10) Order; (11) Equity; (12) Stability of tenure; (13) Initiative; and (14) Team spirit. Although he described the managerial functions as universal, he regarded the principles as flexible. He commented:

“I preferred the word Principle in order to avoid the idea of rigidity, as there is nothing rigid or absolute in administrative matters; everything is a question of degree. The same principle is hardly ever applied twice in exactly the same way, because we have to allow for different and changing circumstances, for human beings who are equally different and changeable and for many other variable elements<sup>(16)</sup>.”

Fayol's contributions to the field of management were so significant that today he is known as “**Father of Modern Management Theory**”. The functions of management provide an excellent framework for the study of management. After an extensive review of literature of management Stephen J. Carroll and Dennis J. Gillen, concluded that:

“The classical functions still represent the **most useful way of conceptualizing** the managers job, especially for management education, and perhaps this is the reason why it is still the most favoured description of managerial work in current management text-books. The classical functions provide **clear and discrete methods of classifying** thousands of different activities that managers carry out and the techniques they use in terms of the functions they perform for the achievement of organizational goals”<sup>(17)</sup>.

The contemporary scholars have **adapted** the classical



functions of management as: (1) Planning; (2) Organizing; (3) Staffing; (4) Directing and (5) Controlling. To Fayol's list of classical functions contemporary scholars have *added staffing* i.e. filling and keeping filled the positions created in the organizational structure with suitable personnel. **Coordinating**, i.e. ensuring that resources and activities of the organization are working harmoniously to achieve the desired goals, is *not regarded as a separate function of management but contemporary scholars consider it as the assence of management.*

### **The Behavioural Approach:**

In the 1920s and 1930s it was felt that Scientific management did not achieve the utmost production efficiency and workplace harmony. Managers encountered difficulties because people did not always follow predicted and rational patterns of behaviour of economic man. Thus interest in human behaviour aspect of organizations increased which resulted in emergence of the Behavioural Approach. The Behavioural viewpoint is a perspective that emphasizes the importance of understanding various factors that influence human behaviour in organizations. In exploring this viewpoint we shall examine four aspects of its development: (1) the contribution of early behaviourists, (2) the Hawthorne studies, (3) the human relations movement and (4) the behavioural science approach<sup>(18)</sup>.

**Hugh Munsterberg** (1863-1916) *an early behaviourist*, in his book *Psychology and Industrial Efficiency* (1913) argued that Psychology could help industry in three major ways. *First*, the psychologists could find ways to identify individuals who are best suited to particular jobs. *Second*, psychologists could identify psychological conditions under which individuals are likely to exert their best efforts for their work. *Third*, psychologists could develop strategies that would influence employees to behave in ways that are compatible with management interests. The idea and examples he provided ignited the imagination of others and led to the establishment of field of **Industrial Psychology**.

The other prominent *early behaviourist* **Marry Parker Follett** (1868-1933) focused on **group dynamics**. Her important contributions to management thought were “Law of the Situation” and “Theory of Conflict Resolution”. She attached much importance to coordination and community service.

Famous **Hawthorne Studies**, a series of experiments to study human behaviour in work situation, were conducted at Western Electric Company at their Hawthorne plant near Chicago during 1924-1933. The first study known as Illumination Experiments (1924-1927), was conducted by company engineers. The study produced confusing results. Therefore, a group of Harvard researchers headed by **Elton Mayo** (1880-1949) was called in by Western Electric Company to join the research. The Harvard researchers conducted experiments in four distinct phases:

- \* Experiments to determine affects on workers productivity of changes in illumination. The purpose was to determine the affects of *working conditions* on productivity.
- \* Experiments to determine affects of other *work related factors* on workers' productivity. These factors include salary increases, introducing varying lengths of rest period, shortened workdays and workweeks, and other changes in working conditions (The Relay Assembly Room Experiment).
- \* An extensive employees interviewing programme to determine *work attitude*.
- \* An analysis of various *social factors* at work (The Banking Wiring Observation Room Experiments).

The researchers concluded that the employees would work harder if they believed management was concerned about their welfare and supervisors paid special attention to them. This phenomenon was subsequently labeled as Hawthorne Effect.

As a result of Hawthorne Studies focus of managers was drastically altered which ushered in **Human Relation Movement**. Human Relation is frequently used as a general term to describe the ways in which managers interact with their subordinates<sup>(19)</sup> Proponents of Human Relation Movement argue that key to productivity lie in showing greater concern for workers so that they would feel more satisfied with their jobs and willing to produce more.

Other famous contributors to Human Relation Movement include **Abraham Maslow** (1908-1970) who is known for his *Hierarchy of Need Theory* which explains motivation and **Douglas McGregor** (1906-1964) who is known for the concept of *Theory X Versus Theory Y* which explains two attitudes of management towards workers.

Last in the Behavioural Viewpoint is the **Behavioural Science Approach** that emphasizes *scientific research* as the basis for developing theories about *human behaviour in organizations* that can be used to establish practical guidelines for managers<sup>(20)</sup>

Above study of the Behavioural Approach reveals that its focus is on inter-relationships between people, work and organization. It is concerned with such topics as motivation, communication, leadership, work group formation etc. These topics are parts of the *directing function*, which Fayol termed as *commanding*. Therefore, the Behavioural Approach can be regarded only a part of management theory and not as an approach to management theory.

### **Quantitative Viewpoint:**

During World War II initially in Great Britain and then in the U.S. military planners formed operation research teams consisting of mathematicians, statisticians, physicists etc. to assist decision making in the areas of deployment of resources and logistics. After the war was over these experts got employment in business organizations where they assisted managerial decision

making by using such techniques as linear programming, queuing theory, simulation, forecasting, inventory modeling, break-even analysis etc.

The quantitative viewpoint *provides tools for decision making. It cannot be regarded as a theory of management or an approach to the theory of management.* Moreover, use of quantitative techniques, although it significantly assist management in making complex decisions, has remained limited. Firstly, because most of the managers do not have sufficient training in these complicated techniques. Secondly, because most of the managerial decision making situations cannot be expressed through mathematical symbols and formulas.

### **The Systems Viewpoint:**

As a result of Hawthorne studies researchers began to believe that workers and workgroups cannot be studied in isolation. Rather, both the systematic and interdependent relationships among work-groups and the influence of external environment should constitute the basis of analysis. As a result, the researchers original interest in one workgroup as a social unit was broadened to include the study of systems forces<sup>(21)</sup>. According to **Chester I. Bernard (1886-1961) --- the pioneer of the systems viewpoint---** a formal organization is a system of consciously coordinated activities or forces of two or more persons. The subsystems comprising the system not only interact with one another but also are heavily dependent upon one another. Further organization is an open system. that interacts with its external environment and is dependent on it for its existence.

The systems viewpoint emphasizes that the managers must *look into the impact of their decision regarding one part of the organization on the other parts.* In other words, managers cannot change a subsystem without affecting the rest. Barnard sees managers as the critical agents who activate the system or organization. He believes the key functions of managers are to provide a system of communication, to promote the securing of

essential efforts, and to formulate and define purpose.

The systems approaches is really a way of thinking about management problems <sup>(22)</sup>. It can better be regarded as an *exercise or device for coordination* between the objectives of various parts of the organization and the objectives of the organization as a whole rather than being regarded as an approach to management.

### **The Contingency Viewpoint:**

The Contingency Viewpoint (also called the Situational Viewpoint) was developed in mid 1960s<sup>(23)</sup>. Management scholars who have contributed to the contingency theory include Fremont Host, James Rosenzweig, Daniel Kast and Robert Kahn, Tom Burns and G. M. Stalker, Robert Lawrence and Richard Lawrence<sup>(24)</sup>. The Contingency Viewpoint arose directly out of the systems viewpoint. It accepts the major propositions of the Systems Viewpoint but extends them in several crucial ways <sup>(25)</sup>. The Contingency approach was developed by managers, consultants and researchers who tried to apply the concepts of major viewpoint of management to real life situations. When methods highly effective in one situation failed to work in other situations, they sought an explanation. The contingency viewpoint starts with the theme of "*it depends*", where it is argued that the solution to any one managerial problem is contingent on the factors that are impinging on the situation<sup>(26)</sup>. Proponents of the contingency viewpoint contend that there is no one best way to manage. The managers must find different ways to fit different situations. Formally defined, the Contingency Viewpoint is an effort to determine through research which managerial practices and techniques are appropriate in specific situations<sup>(27)</sup>.

Critics of the Contingency Viewpoint argue that it is merely meshing of techniques from the other viewpoints of management and there is nothing new in the Contingency Viewpoint. For example, Fayol commented on his fourteen principles of management as:



“The same principle is hardly ever applied twice in exactly the same way, because we have to allow for different and changing circumstances”.

Similarly, Marry Parker Follet, an early behaviourist in 1920 put forth the idea of “Law of Situation”. There is criticism that stressing the “it all depends” view adds more confusion than order to the practice of management<sup>(28)</sup>. The critics of the Contingency Theory has gone further by commenting:

“----- it negates one of the basic attributes of a good theory, which is to provide generalizations that are useful. Contingency Theory is basically nihilistic, it is anti-theory”<sup>(29)</sup>.

Many other management scholars like James A.F. Stoner and R. Edward Freeman say that the Contingency Viewpoint has not yet developed to the point where it can be considered as a true theory by itself.

### **The Theory Z:**

After the admirable success of Japanese Companies in international market, especially in the fields of automobiles and electronics, interest of scholars and practitioners in Japanese practices of management has grown. **William G. Ouchi**, a management professor, explored the reasons *why Japan has attained much greater productivity, growth rate and quality standard?* He come up with an explanation which he arbitrarily called theory Z. He published his work in 1978 with the title “Theory Z: How Business can Meet the Japanese Challenge”? He concluded that the *key factor is to create an environment* which motivates the workers to devote best the of their efforts for improved performance. In this respect he particularly pointed out the following three important practices of Japanese managers:

1. *Lifetime employment*, extending to 35% of the work force and a guarantee of job security.

2. *Identical salary* increases and promotion for those in the same age group.
3. Career paths that provide each employee *experience in every phase* of organization's operation<sup>(30)</sup>

In Theory Z organizations, it is "*we*" rather than "*us versus them*" attitude. Theory Z managers commonly view their organizations as a family. Consequently, according to Ouchi, trust is built that in turn motivates all members to do their best to achieve shared objectives.

Although some of the authors on management has classified Theory Z as an approach to or theory of management but most of the scholars consider it as *part of their discussion on motivation*.

#### **Attributes of Excellence:**

In 1982 two management consultants, Thomas J. Peters and Robert H. Waterman wrote one of the best selling nonfiction books "*In Search of Excellence*". Its purpose was to point out the managerial practices of America's best companies. They selected thirty six excellent companies and after interviewing managers of these companies they isolated eight attributes of excellence. The brief titles of these attributes are: (1) A bias for action, (2) Close to customers, (3) Autonomy and entrepreneurship, (4) Productivity through people, (5) Hand on, value-driven, (6) Stick to knitting, (7) Simple form lean staff and (8) Simultaneous loose-tight properties<sup>(31)</sup>.

Peters and Waterman continued to write in journals, give speeches, and upgrade their messages. After some of the companies profiled in their book lost their excellence, they concluded that things were changing so rapidly that no single set of prescriptions, like those presented in their book, are always adequate or appropriate. They began to speak of constant change in the outside world and the need for constant change within organizations<sup>(32)</sup>. Attribute of excellence is clearly *a discussion of*

*management style and not a theory of management.*

### **Conclusion:**

The list of approaches to or theories of management is not yet over. A few more viewpoints like Total Quality Management, Global Interdependence, The Learning Organization, Reengineering, Resource Dependence, Population Ecology, Competitive Strategy etc. can also be added as more recent approaches. Detailed discussion of each of them will take us far away from our main topic. The point of contention is that Theory of Numbers or Theory of Equations is not called Theory of Mathematics or an Approach to Mathematics, Theory of Sound or Theory of Gases is not called Approach to Physics or School of Thought in Physics, similarly Theory of Epigenesis or Theory of Evolution is not called a Theory of Biology or an Approach to Theory of Biology. The reason is that each of these theories deals only with a part of the relevant subject and not with the whole of the subject. Then why Scientific Management, which deals only with the efficient organization and operation of production, is called a Theory of Management. The Management Science which provides quantitative tools for some decision making situations is called an Approach to Management, the Behavioural Viewpoint which deals only with directing function of management is called a School of Thought in management, the System Theory or Contingency Theory which deals only with the application of principles of management is referred to as a Theory of Management or an Approach to Management Theory?

Two explanations of this misnomenclature can be given: *Firstly*, because of the diversity in interests, perceptions and skills; the early theorists and researchers have focused on different aspects of management process. Certainly the actual experience of these writers had significant influence on what they considered important and on the principles they advocated. Many of these early writers had experience in only certain type of organizations and they assumed these were typical of all of the others, but it was not so. In addition the problems that most organizations faced

differed from one time period to another. After an organization rationalizes its production other problems emerge as the most important, furthermore, the solution of early problems give rise to new problems<sup>(33)</sup>. The *second reason* of this misnomenclature is that until 1950 there was no comprehensive theory of management popular among managers and scholars, as such, the scope of the subject of management was undefined. Although Henry Fayol wrote his "Administration Industrielle et Generale" in 1916 in which he put forth his management process approach but the book was in French language. Fayol's work did not get popularity in France because it was overshadowed by his contemporary Taylor's Scientific Management which achieved immediate and significant productivity increases in factories. Fayol's work mostly remained unknown to the English speaking world until 1949 when an English translation of his book was published which was widely available.

It was in mid 1950s when two professors Harold Koontz and Cyril O'Donnell of University of California, Los Angeles for the first time used the functions of Planning, organizing, staffing, directing and controlling as a frame work for a textbook of management that for 20 years was the most widely sold textbook of the subject. The most popular textbooks still continue to organize around management functions<sup>(34)</sup>. As such now we have arrived at a consensus on Modified Management Process Approach as an approach to management theory.

## References:

1. Edwin B. Flippo & Gray M. Munsinger, "Management", 4th Ed., Allyn & Brown Inc. (1978), Page 14.
2. Robert Krienter, "Management", 4th Ed., Houghton Mifflin Company, Boston. (1989), Page 55.
3. Harold Koontz, "The Management theory Jungle", The Academy of Management Journal, (December 1961).

4. William C. Frederick, "The Next Development in Management Science: A General Theory", *The Academy of Management Journal*, (September 1963).
5. Horold Koontz, "The Management Theory Jungle Revisited", *Academy of Management Review*, (April 1980).
6. James H. Donnelly Jr., James L. Gibson, John M. Invancevich, "Fundamentals of Management", 5th Ed., Business Publications Inc., Texas, (1984), Page 5.
7. James A.F. Stoner & R. Edward Freeman, "Management", 5th Ed., Prentice Hall, (1994), Page 45.
8. George R. Terry & Stephen G. Franklin, "Principles of Management", 8th Ed., Richard D. Irwin Inc., (1982), Page 29, 38.
9. Richard M. Hodgetts, "Management", Academic Press Inc. (1985), Page 9.
10. Gary Dessler, "Management Fundamentals", 4th Ed., Printice Hall Inc., (1985), Page 9.
11. James A.F. Stoner & Charles Wanket, "Management", 3rd Ed., Printice Hall Inc., (1988), Page 30.
12. Robert. F. Fulmer, "The New Management", 4th Ed., Macmillan Publishing Company (1988), Page 27.
13. Heinz Weihrich & Harold Koontz, "Management, A Global Prespective", 10th Ed., McGraw Hill Inc., (1995), Page 34.
14. Henry Albers, "Principles of Management, A Modern Approach", 4th Ed., John Wiley & Sons Inc., (1974) Page 32.



15. Andrew D. Szilagyi, Jr., "Management and Performance", 2nd Ed., Scott Foresman and Company, (1984), Page 51.
16. Henri Fayol, "Industrial and General Administration", Translated by J.A. Coubrough, International Management Institute, Geneva, (1930). Fayol used the word administration for what we call management. Source: James A.F. Stoner and R. Edward Freeman, "Management" 5th Ed., Printice Hall Inc. (1994) Page 36.
17. Stephen J. Carroll and Dennis J. Gillen, "Are Classical Management Functions Useful in Describing Managerial Work"?, Academy of Management Review, (January 1987), Source Robert Krienter, "Management", 4th Ed., Houghton Mifflin Company, Boston, (1989), Page 57.
18. Kathryn M. Bartol & David C. Martin, "Management", 2nd Ed., McGraw Hill Inc., (1994), Page 47.
19. James A.F. Stoner & R. Edward Freeman, "Management" 5th Ed., Printice Hall, (1994), Page 40.
20. Kathryn M. Bartol & David c. Martin, "Management", 2nd Ed., McGraw Hill Inc., (1994) page 53.
21. Martin J. Grannon, "Management, An Integrated Framework", 2nd Ed., Little Brown and Company, (1982), page 37.
22. James H.Donnelly, Jr., James L. Gibson & John M. Ivancevich, "Fundamentals of Management", 5th Ed., Business Publications Inc., (1984), page 7.
23. Don Hellriegel & John W. Slocum, Jr., "Management., 7th Ed., South-West College Publishing, (1996), page 59.
24. George R. Terry & Stephen G. Franklin, "Principles of Management", 8th Ed., Richard D. Irwin Inc., 1982, Page 29.

25. Martin J. Gannon, "Management, An Integrated Framework", 2nd Ed., Little Brown and company, (1982), page 44.
26. Ramon J. Aldag & Timoty M. Stearns, "Management", South-Western Publishing Company, (1987), page 57.
27. Robert Krienter, "Management", 4th Ed., Houghton Mifflin Company, (1987), page 75.
28. Andrew D. Szilgyi, Jr., "Management and Performance", 2<sup>nd</sup> Ed., Scott Foresman and Company, (1984), page 66.
29. Joseph W. McGuire, "Management Theory: Retreat to the Academy", Business Horizons (July – August 1982) Source: Robert Krienter, "Management", 4th Ed., Houghton Mifflin Company, (1989), page 78.
30. James H. Donnelly, Jr., James L. Gibson, John M. Invancevich, "Management", 5th Ed., Business Publications Inc., (1984), Page 307.
31. For detailed study of these attributes see Robert Krienter, "Management", 4th Ed., Houghton Mifflin Company, (1989), page 81.
32. Thomas J. Bateman & Carl P. Zeithamal, "Management, Function and Strategy", Irwin, (1993), page 49.
33. Stephen J. Carroll, Jr., Frank T. Paine, John B. Miner, "The Management Process, Cases and Reading" 2nd Ed., Macmillian Publishing Company Ltimited (1977), Page 1.
34. Stephen P. Robbins and Mary Coulter, "Management" 5th Ed., Prentice Hall Inc., (1996), page-9.