CHAPTER – 2

REVIEW OF RELEVANT LITERATURE

2.1. INTRODUCTION:

This chapter contains a review of literature related to the study. The paradigm shift in economic development of roles of educational and industrial organisations are explored, in the first part, highlighting the observations and thoughts of the Strategic Management Guru, Michael E Porter. Followed by this, an account of findings and conclusions of some of the studies in Educational Administration is given. The literature related to Communication in organisation and Decision making in organisation are reviewed from different dimensions.

2.2. NEW PARADIM IN ECONOMIC DEVELOPMENT AND ROLES OF EDUCATION AND INDUSTRY:

In the present competitive world, the development of any organisation largely depends on how best it can survive the competition in its environment.

The importance of co-ordination between Educational and other institutions with Industry for establishing a competitive edge is best illustrated in one of the articles of Michael E Porter (C. Roland Christensen Professor of Business Administration at the Harvard Business School in Boston, Massachusetts.) The highlights of his study and observation are summarised below.

Today's economic map of the world is dominated by what Porter calls *clusters* : critical masses - in one place - of unusual competitive success in particular fields. Clusters are a

striking feature of virtually every national, regional, state and even metropolitan economy, especially in more economically advanced nations. Silicon Valley and Hollywood may be the world's best known clusters. Clusters are not unique, however, they are highly typical and therein lies a paradox: the enduring competitive advantages in a global economy lie increasingly in local things - knowledge, relationships, motivation - that distant rivals cannot match.

2.2.1. Clusters and competition

Clusters are geographic concentrations of interconnected companies and institutions in a particular field. Clusters encompass an array of linked industries and other entities important to competition. They include, for example, suppliers of specialised inputs such as components, machinery and services and providers of specialised infrastructure. Clusters also often extend downstream to channels and customers and laterally to manufacturers of complementary products and to companies in industries related by skills, technologies or common inputs. Finally, many clusters include governmental and other institutions - such as **universities**, standards - setting agencies, think tanks, vocational training providers and trade associations - that provide specialised training, education, information, research and technical support.

The California wine cluster is a good example. It includes 680 commercial wineries as well as several thousand independent wine grape-growers. An extensive complement of industries supporting both wine making and grape growing exists, including suppliers of

grape stock, irrigation and harvesting equipments, barrels, and labels; specialised public relations and advertising firms and numerous wine publications aimed at consumer and trade audiences. A host of local institutions is involved with wine, such as the world-renowned viticulture and enology program at the University of California at Davis, the Wine Institute, and special committees of the California senate and assembly. The cluster also enjoys weaker linkages to other California clusters in agriculture, food and restaurants and wine-country tourism.

Modern competition depends on productivity, not on access to inputs or the scale of individual enterprises. Productivity rests on how organisations compete, not on the particular fields they compete in, organisations can be highly productive in any industry - shoes, agriculture or semiconductors - if they employ sophisticated methods, use advanced technology and offer unique products and services. All industries can employ advanced technology; all industries can be knowledge intensive.

The sophistication with which organisations compete in a particular location, however, is strongly influenced by the quality of the local business environment. Organisations cannot employ advanced logistical techniques, for example, without a high quality transportation infrastructure. Nor can companies effectively compete on sophisticated service without well-educated employees. Businesses can not operate efficiently under onerous regulatory red tape or under a court system that fails to resolve disputes quickly and fairly. Some aspects of the business environment, such as the legal system, for example, or corporate tax rates, affect all industries. In advanced economies, however,

the more decisive aspects of the business environment are often cluster specific; these constitute some of the most important microeconomic foundations for competition.

Clusters affect competition in three broad ways: first, by increasing the productivity of companies based in the area; second, by driving the direction and pace of innovation, which underpins future productivity growth; and third, by stimulating the formation of new businesses, which expands and strengthens the cluster itself. A cluster allows eah member to benefit as if it had greater scale or as if it had joined with others formally - without requiring it to sacrifice its flexibility.

2.2.2. Institutions and Industrial policy

Investment made by government or other public institutions - such as public spending for specialised infrastructure or educational programs - can enhance a company's productivity. The ability to recruit employees trained at local programs, for example, lowers the cost of internal training. Other quasi - public goods, such as the cluster's information and technology pools and its reputation, arise as nature by-products for competition.

It is not just governments that create public goods that enhance productivity in the private sector. Investments by companies - in training programmes, infrastructure, quality centers, testing laboratories, and so on- also contribute to increased productivity. Such

private investments are often made collectively because cluster participants recognise the potential for collective benefits.

Productivity, not exports or natural resources, determines the prosperity of any state or nation. Recognizing this, governments should strive to create an environment that supports rising productivity. Sound macroeconomic policy is necessary but not sufficient. The microeconomic foundations for competition will ultimately determine productivity and competitiveness.

Governments - both national and local - have new roles to play. They must ensure the supply of high quality inputs such as educated citizens and physical infrastructure. They must set the rules of competition - by protecting intellectual property and enforcing antitrust laws for example, so that productivity and innovation will govern success in the economy. Finally, governments should promote cluster formation and upgrading and the buildup of public or quasi-public goods that have a significant impact on many linked businesses.

The ideas of Michael Porter, thus, reflect the importance of Education and Industry co-operation with similar sub systems at the local, regional and national arena for improving the productive potential. The administrative policies and processes at the macro and micro levels play important roles in shaping up the educational and industrial organisations. Since Educational institutions play a vital role in improving the

productivity and economy, their administrative processes also demand much attention. Let us now, see some of the studies in Educational Administration.

2.3.   STUDIES IN EDUCATIONAL ADMINISTRATION:

2.3.1. School Administration and Home Management

Dr.M Georgina Di-Ibor of Department of Education, Ahmadu Bello University, Zaria, Nigeria, in her study of student unrest in educational institutions in Nigeria, had proposed certain suggestions towards the need for management education for school managers as well as for home managers (parents). Her work is briefly analysed below.

The Context

A common thread basic to all human endeavors, worldwide, is 'management' and 'administration'.   People are often oblivious to this fact. Management is involved even at play, for, in that activity, group and individual goals are usually predetermined, positions are assigned and specific play patterns are followed. Someone is appointed to call the plays, following certain rules and regulations. All these actions are encapsulated in the principles of management which were delineated by Drucker (1977) as Planning, Organising, Directing, Controlling, Staffing and Actuating. The person who is appointed to call the play is actuated by that appointment to assume a leadership position. Other members of the play organisation have thus given him or her the authority and right to influence their behaviour through the directions given for the play. Indeed, a characteristic of every effective group effort, designed to attain group goals (at the least

cost of time, money, material and comfort) is that it adopts the basic process, principles and techniques of administration and management (Schultz, 1977). This applies to the home, perhaps even more critically than is the case in other human organisations.

Considering how desirable 'management' is, for the effective functioning of any organisation, it might be expected that all in leadership positions understand and can apply the skills of good management. Unfortunately, this is patently not the case. Many do not understand, educational management and administration as, in large part, the management of myths (Macpherson, 1991). An educational institution is a human creation, and as such, its manager is contending with the phenomenon of human behaviour, perceptions and beliefs, in all their cultural complexity. Education starts informally, in the home by producing systems · of beliefs and myths about appropriate behaviour. Parents, particularly mothers, are the first educators and administrators that children have. This occurs long before children encounter the formal myths of school organisation that are sustained by school administrators. The cultural pattern that help determine whether a student becomes disciplined and well behaved (or unruly, problematic students when they clash with the school's culture) are therefore, largely determined in the home.

There is a reciprocal aspect to this issue. In Nigeria, the Government's legislation supports the formation of Parent-Teacher Associations in every primary and secondary school. The meetings of these associations sometimes last as long as six hours. The issues discussed, more often not, center on the indiscipline of the students. Parents offer

various suggestions as remedies. The school heads, in turn, usually make suggestions to parents as to their own role in the effort. Yet, at the next meeting, there is a repetition of the problems. This suggests that management education needs to be provided for parents.

Trial and error is not the best way to learn or to execute plans. If parents are overwhelmed by the demands of the contemporary period, in terms of their children's behaviour, then deliberate provision needs to be made to assist them in their effort. While many claim that experience is the best teacher, it has also been pungently argued that "it is only fools who learn by experience, wise men do not have to learn of the existence of every brick wall by banging their own noses into them" (Jennings, 1977).

In support of this view, Drucker (1977) declared that "management and managers attend to the specific needs of all institutions, from the smallest to the largest. They are what hold it together and make it work". According to Kirkpatrick (1987), the term 'institution' has the connotation of 'beginning'. Hence, the family and the school can both be seen as kinship institutions. Management is thus "a basic need, irrespective of the size and nature of the social organisation". (Koontz et al., 1983).

Research on Management Education for Parents

A survey conducted on this issue (Di-Ibor, 1988) produced some interesting findings. Five Nigerian states were sampled; East, West, Middle-belt, North and the Federal Capital territory. A total of 800 subjects were selected from three main groups:

educationists, parent-teacher associations' leaders and student leaders of secondary schools. The survey questions sought answers to issues such as :

- the desired level of interaction between school administrators and the homes of students;

- whether or not both parents should be involved in a program on the management of the youth;

- whether that program should be for a particular parent, e.g. mother or father;

- how it should be organised in terms of 'formal' or 'informal' provisions;

- who should draw up the programs - educational administrators or management consultants from industry;

- what should constitute the major component of the program - the content was to be selected from a number of managerial issues;

- whether or not women really are the traditional home managers, as cultural studies suggest;

- whether there are many women in school management positions; and

- whether qualified women should be appointed leaders of schools.

The open questions included the appeal for suggestions on effective school management. It was generally believed (89%) that the most appropriate group to develop a management programme were not management consultants from business firms but educational administrators and managers. These respondents believed that the home is similar to a school in a number of ways and that educative managerial practices are far

more likely to achieve the objectives of individuals and human service organisations that management designed to improve the efficiency and effectiveness of profit-making organisations.

Discussion

There was an interesting tension in many responses. On one hand, women are still generally regarded as the custodians of the managerial role in families, even when they are compelled by economic pressures to work outside the home. On the other, there is a cultural stigma in the workplace that remains an obstacle to womens' participation in institutional managerial roles. Ironically, the social stigma is held to be particularly intense in educational institutions and in prominent political positions. Nigeria has at least 13 universities, for example, but only one female Vice Chancellor.

There was also a curious ambivalence over male roles by those respondents who saw themselves as both breadwinners and as competent managers of a complex, intricate primary organisation - a home. On one hand they sustained a belief in the traditionally accepted role of the man, as the head of the family. On the other they recognised and yet discounted any bread-winning incapacity in their partners when they sought explanations for role overload. Discriminatory practices were generally explained as the consequence of near-solid structures, not as contestable cultural artifacts. And yet, with respect to Nigerian educational administration, the Table 2.1. suggest that substantial potential

leadership is simply being wasted by discriminatory appointment practices (Di-Ibor, 1988).

Frequency Distribution of Education Managers and Teachers by Gender, in Seven States of Nigeria

	Principals		Education Officials		Teachers	
	Absolute Freq.	%	Absolute Freq.	%	Absolute Freq.	%
Male	181	76.1	95	77.2	564	68.3
Female	55	23.1	21	17.1	253	30.6
Missing cases	2	.8	7	5.7	9	1.1
Total	238	100.0	123	100.0	826	100.0

Table 2.1.

Conclusions

Three conclusions were drawn from this research and discussion:

1. management education is needed for school and home managers which emphasises communication and collaborative problem solving when managing the youth;

2. management structures at school should be modeled on family and kinship patterns; and

3.   leadership education is needed for home and school managers that includes:

    ا.   the exercising of interpersonal influence;

    ب.   situational and contextual analysis;

    ج.   the attainment of specified goals; and

    د.   the nurturing of communication

The chaotic incidents now plaguing the educational institutions have made it necessary that educational administrators and managers should explore new strategies. The underutilisation of available expertise is a managerial crime. Cultural stigmatisation must also be challenged by changes to public administrative policies. The recognition of the part which women can play, if literate, needs to be matched by the efforts of the educational administration community. In essence, the task is to find means of extending the best of home management into schools and into nation building and to make the best of school management available to home managers.

2.3.2. Chaos Theory for Administrators

Another interesting theory in Educational Administration, the investigator came across, is the **chaos theory,** the aspects of which have equal relevance for Educational as well as for Industry managers. Following is a detailed account of this theory explained by Kay C E Braggett, the principal of a New South wales Central School.

The Context Of Administrative Reform

School administrators have encountered considerable turmoil in recent times (Simpkins, et al., 1987). As governments have increasingly taken a leading role in introducing change, there has been an urgency for administrators to develop new skills to cope with changing circumstances and new employment challenges.

School systems throughout Australia and much of the western world are currently feeling the effects of major organisational restructuring processes, with many systems moving from long-established centralised administrative approaches to new de-centralised, school-centered administrative practices. Although the attempts by government to enhance the quality of public education, by radically altering management structures and practices, have varied, there appears to be general agreement by management review committees and politicians that the provision and delivery of education needs to be "a much more fluid and responsive process...[allowing a] ...... greater degree of initiative for those 'within the system'" (Scott, 1990:60).

In the following discussion the writer presents an interpretation of how administrators might usefully examine the reality of their own organisations from a new perspective and perhaps enhance management practices within their won school settings. The discussion challenges readers to focus attention on the dynamics of their organisation and to appraise how this might influence management and planning in these new, uncertain times. It is believed that administrators can enhance their administrative practices through organisational analysis and that new insights gleaned from the science of chaos may assist.

Chaos Theory

To apply the science of chaos, we might begin with Edward Lorenz's classic experiment, which produced the well-documented Butterfly Effect principle. Whilst using computer modeling to predict weather patterns, Lorenz discovered that "tiny differences in input could quickly lead to overwhelming differences in output" (Gleick, 1987:8). Translated to weather forecasting, it seemed that the tiniest alteration in starting conditions could be manifested in radically different forecasts. This phenomenon became known as the "Butterfly Effect" because it was suggested that "a butterfly stirring the air today in Peking [cloud] transform storm systems next month in New York" (Gleick, 1987:8). The importance of this finding, where a small change of initial conditions could cause an explosive change elsewhere, was twofold. First, it led Lorenz to conclude that long range forecasting was impossible, and second, it demonstrated that seemingly chaotic or random behaviour is not confused or diabolical, but instead is inextricably related to order itself.

Chaos and School Administration

The casual observer may at first consider that links between chaos theory and school administration are remote or even non-existent. However, if one thinks of a school as a living system, it is possible to accept that it is also a complex, dynamic system which is

open to the environment, with exchanges of matter in the form of inputs and outputs. Beavis (1990:47-48) suggested that a school is:

- a holistic system that is distinguishable from its environment yet, inextricably embedded in it;

- one that is able to maintain its identity by a self-renewing process; and

- one that is able to evolve and adapt to a changing environment by self-organising mechanisms.

Viewed from this perspective, it is possible to consider that the living system concept provides a clear representation of the culture of the organisation. Jelinek (1983:33) argued that "culture - another word for social reality - is both product and process, the shaper of social interaction [with] outcomes [being] continually created". It therefore seems pertinent to ask if schools are subject to the laws of chaos and whether these processes and discoveries can be applied to school administration.

School Renewal and Chaos

Turning attention to the emphases outlined in the policy of Schools Renewal within the New South Wales context, we can note that fluctuations from within the system may be multi-faceted. Opportunities to involve parents and the community in school decision making will undoubtedly open avenues that have been previously untapped. Opportunities to initiate staff developments at school level, to select resources, and to

manage reforms are further instances of opportunities for administrators to grasp and capitalise on unexpected nuances or ripples within school settings.

A leader needs to identify and focus upon fluctuations from a host of other sources, giving support and encouragement, and integrating them within the whole. Leadership of this kind requires visibility so that the leader is "in position to sew seeds, or make the small starts, or give encouraging feedback as opportunities [arise]" (Beavis, 1990:49). Within subsystem, the leader can delegate to empower others to exercise leadership within subsystems. In this way, the subsystems will themselves undergo dynamic change, thus taking the whole school to a more sophisticated and more coherent order. Planning that encourages participation by group within the total school organisation is both highly desirable and beneficial.

Sungaila (1989:12) observed that translating the Butterfly Effect into leadership terms "suggests that the creative input of the single individual, making a very small but perhaps very courageous start in challenging the status quo, can effect ..... massive change". Administrators can expand this option by developing leadership skills of colleagues within a school setting so that they too might be the catalyst which begins a process that produces 'massive change'.

The Lessons of Chaos

Chaos theory, which comes from the realm of science and mathematics, presents new ways of thinking for astute leaders. It provides a refreshing analysis of systems and

encourages readers to move from a reductionist mode of thought to a more open, flexible approach. More importantly, it allows us to "open eyes to patterns that might otherwise be considered formless", to view schools as living, self-renewing, self-organising organisations, and to raise and provide new questions and answers (Stewart, 1989:242).

It is imperative for administrators of schools to both respect and examine critically traditional beliefs, attitudes and values. This article has attempted to challenge traditional thinking and to provide alternative ways of looking at changes that are occurring as well as offering suggestions as to how we might assist those who manage and lead in the new era. The writer suggests that administrative planning and practices will be enhanced when different viewpoints are explored. For example, if well formulated school plans fail, it might be appropriate for administrators to simply 'move the goalposts'.

2.3.3. Competency-Based Management Education

The success of effective theories lies in their practical adaptability. Management education in educational administration is no exception from this dimension. It is therefore, worth explaining a practical programme initiated by National Institute of Educational Planning and Administration (NIEPA) and implemented in Baroda for Educational Managers by Dr. Snehaben Joshi and Dr Derek Sequeira of Faculty of Education & Psychology, M.S.University of Baroda.

The context

In India, as in the world over, education has always been considered a pre-eminent agent of social change. When examined along with the other prominent social sub-systems like

the economy, industry, religion, health and government, however, education is a 'poor cousin'. Only 2.6% of planned expenditure is actually reserved for education.

Toffler's 'Instant Culture' pervades India. The manufacturing sector has become the favourite son of governments. Consumerism is paramount. The stark reality, however, remains. Consumerism is a phenomena of the middle and upper classes. The vast majority of India's 900 million inhabitants have pressing needs which have not yet been translated into demand.

Education commissions in India in the past have all addressed themselves to these issues. The Indian Education Commission of 1882-83, the Hunter Commission, paid particular attention to the development of elementary education. The problems attending university education were studied by the Indian Universities Commission of 1902 and the Calcutta Universities Commission of 1948-49. The Secondary Education Commission of 1952-53 and the Education Commission of 1964-66 similarly analysed the numerous problems that beset education in India, and came forth with solutions that ranged from the utopian to the pragmatic. By and large, however, while sweeping changes were initiated in educational structures, curricula, vocationalisation, guidance and counseling and evaluation, very little mention was ever made to the training and development of school principals - the Education Managers.

In contrast, teacher training was gradually evolving into a scientifically ordered program where each input was carefully weighed for its merits before inclusion into the teacher

education programmes at the bachelor of Education and Master of Education levels. No such training was envisaged for principals of schools.

A few universities instituted a Diploma in Educational Administration but a perusal of their course outlines indicates a heavy theoretical bias.

Again, over the decades, the criteria for the selection of teachers was becoming more standardised. This did not apply to the selection of principals of schools. When principals retired, the next most senior teacher was appointed. Often this was done without an interview and was an appointment by each school's Board of Trustees.

In such conditions it was no great wonder that the incumbent often proved inadequate to the myriad of complex tasks. This is not to suggest that principals of masterly managerial abilities did not emerge by these were the exception.

The Genesis of the Baroda Model

The NIEPA in New Delhi, under the direction of the Ministry of Human Resource Development, Government of India, invited 30 organisations at the national level to express interest in the "Networking in Educational Management" project. These organisations were state councils of Educational Research and Training, some Departments of Education from Universities in India, Indian Institutes of Management, State Institutes of Education and the Department of Educational Administration, Faculty of Education and Psychology, M.S.University of Baroda. A concept developed by

Mukhopadhyay et al. (1991) at NIEPA, called Competency Based Institutional Management (COMBIME), was discussed with the directors of the collaborating organisations.

COMBIME was developed on the basis of 54 research studies completed at NIEPA (Mukhopadhyay, Murthy and Kandan, 1991). 300 tasks identified were subjected to a Q sort analysis. 25 senior administrators were involved and the tasks were validated by a pilot survey of school principals. This was followed by a workshop of 19 senior state administrators, educationists, management scientists, researchers and experienced headmasters. The tasks were clustered and divided in 8 major areas - academic, personnel, finance, school plant and infrastructure, linkage and interface, student services, methods and procedures and managerial excellence. The outcome was 54 competencies that a head of a school apparently needs to possess to different degrees in Indian schools.

Assumptions

The Baroda COMBIME programme views the school principal or the educational manager as a unique, special and incredible individual who has been put in charge of a team of equally unique, special and incredible individuals. We also believe that, while the structure of personality can become affected by alterations in the context, principals need to take the whole view of themselves in action and take charge of their own

development.   They need to see themselves as a truly 'all round individual' in touch with the goals of education, the interests of teachers and students, and society.

The second significant emphasis of the COMBIME programme is on 'being' rather than 'acting'. Too often, training programmes aim narrowly at altering the way people do things like talking, discussing, etc. Thus people have learned to act happy, act confident and act pleasant, without ever really experiencing happiness, confidence or pleasantness. We work on the assumption that if the personality of leaders undergo transformations, through their own efforts, then everything emanating from these transformed personalities, including all communication, will also be transformed.

Outcomes

The underlying philosophy of the Baroda COMBIME Model is that while skills may be acquired through training, they will not prove beneficial unless they are accompanied by a set of attitudes and values that are social, selfless and positive. When such a philosophy prevails, the principals themselves will take on the responsibilities of developing themselves, skills and all. After three programmes; this seems to be coming to pass.

The three programmes of COMBIME have involved 75 principals. Once all of the principals in Baroda have attended this programme, there were plans to initiate programmes at a higher level that require more specialisation. Ultimately, the aim was to providing a type of educational consultancy service wherein the principals are both the contributors as well as the beneficiaries.

2.4 COMMUNICATION IN ORGANISATION:

2.4.1 Historical perspective

Communication is one of the most frequently discussed dynamics in the entire field of

organisational behaviour, but it is seldom clearly understood. In practice, effective

communication is a basic prerequisite for the attainment of organisational goals, but it has

remained one of the biggest problems facing modern management. Communication is

an extremely broad topic and of course is not restricted to the organisational behaviour

field. Some estimates of the extent of its use go up to about three-fourths of an active

human being's life, and even higher proportions of a typical manager's time. In one of the

oft-quoted studies in communication (Figure 2.1.) the managers observed to be devoting

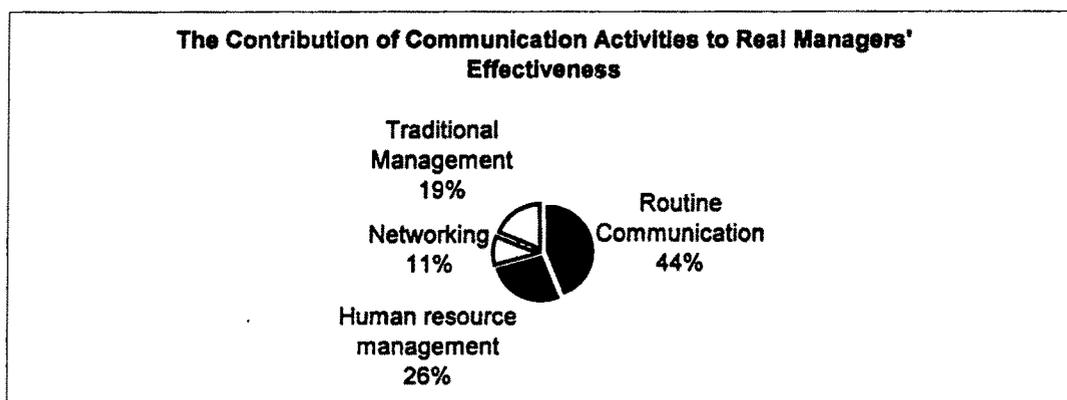about a third of their activity for routine communication.

The Contribution of Communication Activities to Real Managers' Effectiveness

Traditional
Management
19%

Routine
Communication
44%

Networking
11%

Human resource
management
26%

Figure 2.1.

(Source: Fred Luthans, Richard M. Hodgetts, and Stuart A. Rosenkrantz, *Real Managers*, Ballinger, Cambridge, Mass, 1988, p. 68.)

Early discussions of management gave very little emphasis to communication. Although communication was implicit in the management function of command and the structural principle of hierarchy, the early theorists never fully developed or integrated it into management theory.

Fayol presented a simplified version of the formal organisation (Figure 2.2.). This gangplank concept has direct implications for horizontal communication systems in modern formal organisations. Unfortunately, such classical insights were few and far between.

Simplified version of the Formal Organisation
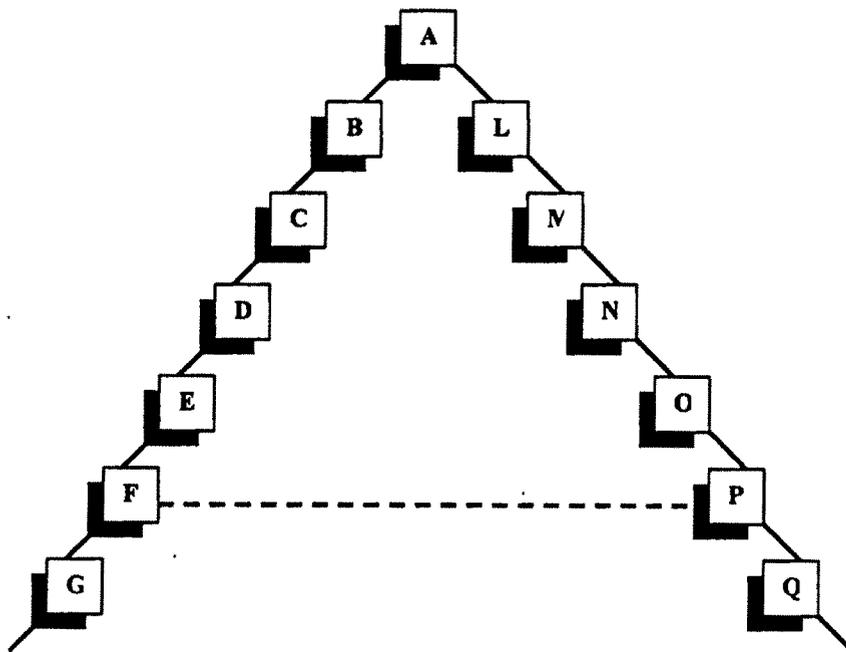
(Source : Henri Fayol, *General and Industrial Management*, trans. By Constance Storrs, Pittman, London, 1949, p.34)

Figure 2.2.

If the formal channels in this organisation were strictly followed and F wanted to communicate with P, the communication would have to go through E-D-C-B-A-L-M-N-O-P and back again.

It largely was Chester Barnard in the late 1930s who meaningfully developed communication as a vital dynamic of organisational behaviour. He was convinced that communication is the major shaping force in the organisation. In Barnard's words "The absence of a suitable technique of communication would eliminate the possibility of adopting some purposes as a basis of organisation. Communication technique shapes the form and the internal economy of organisation."

Barnard also interwove communication into his concept of authority. He emphasized the meaning and understanding must occur before authority can be communicated from superior to subordinate. He listed seven specific communication factors, which are especially important in establishing and maintaining objective authority in an organisation. He believed them to be, in brief, the following :

(i) The channels of communication should be definitely known.

(ii) There should be a definite formal channel of communication to every member of an organisation

(iii) The line of communication should be as direct and short as possible

(iv) The complete formal line of communication should normally be used.

(v) The persons serving as communication centers should be competent

(vi) The line of communication should not be interrupted while the organisation is functioning.

(vii) Every communication should be authenticated.

2.4.2. Definition of Communication

The term communication is freely used by everyone in modern society, including members of general public, organisational behaviour scholars and management practitioners. In addition the term is employed to explain a multitude of sins both in the society as a whole and in work organisations. Despite this widespread usage, very few members of the general public - and not a great many more management people - can precisely define the term. Part of the problem is that communication experts have not agreed upon a definition themselves. Most definitions of 'communication' used in organisational behaviour literature stress the use of symbols to transfer the meaning of information.

In addition to its being a personal process, a communication expert emphasizes the behavioral implications of communication by pointing out that 'the only means by which one person can influence another is by the behaviors he performs - that is, the communicative exchanges between people provide the sole method by which influence or effects can be achieved.' In other words, the behaviors that occur in an organisation are vital to the communication process. This personal and behavioral exchange view of communication takes many forms.

The continuum in figure 2.3. Can be used to identify the major categories of communication that are especially relevant to the study of organisational behaviour. On

the one extreme is the computer-based management information systems (MIS) and telecommunication technology approach, and on the other extreme is nonverbal communication. The middle ground is occupied by organisational and interpersonal approaches, which represent the perspective taken in this study.

The Communication Continuum

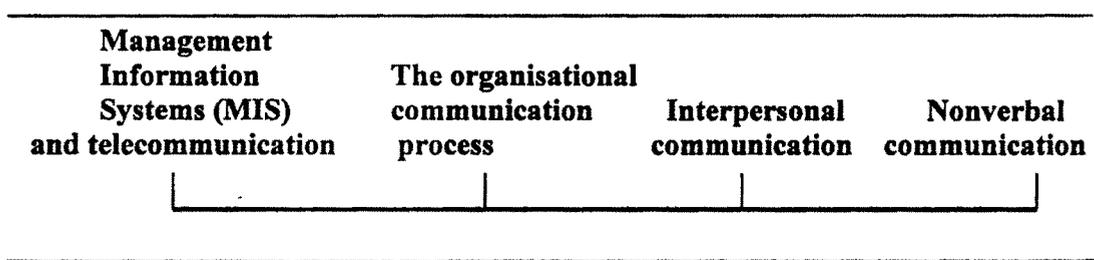| Management Information Systems (MIS) and telecommunication	The organisational communication process	Interpersonal communication	Nonverbal communication

Figure 2.3.

2.4.3. Interpersonal Communication

In interpersonal communication, the major emphasis is on transferring information from one person to another. Communication is looked upon as a basic method of effecting behavioral change, and it incorporates the psychological processes (perception, learning and motivation), on the one hand and language on the other. Listening sensitivity and nonverbal communications are also closely associated with this approach. For example, Bill Marriott, Jr., the CEO of a hotel chain, spends nearly half his time listening and talking to front-line employees. Importantly, he listens and then talks to his people.

The importance of Feedback

There must be both a sender and a receiver in order for interpersonal communication to take place. The sender is obviously important to communication, but so is the neglected receiver, who gives feedback to the sender.

The importance of feedback cannot be overemphasized because effective interpersonal communication is highly dependent on it. Proper follow-up and feedback requires establishing an informal and formal mechanism by which the sender can check on how the message was actually interpreted. Feedback makes communication a two-way process.

Table 2.2. summarizes some charachetistics of effective and ineffective feedback.

Characteristics of Feedback for Effective and Ineffective Interpersonal Communication in Human Resources Management

Effective Feedback	Ineffective Feedback
1. Intended to help the employee	1. Intended to belittle the employee
2. Specific	2. General
3. Descriptive	3. Evaluative
4. Useful	4. Inappropriate
5. Timely	5. Untimely
6. Employee readiness for feedback	6. Makes the employee defensive
7. Clear	7. Non understandable
8. Valid	8. Inaccurate

Table 2.2.

(Source: Fred Luthans and Mark J. Martinko, *The Practice of Supervision and Management*, McGraw-Hill, New York, 1979, p.183.)

Besides feedback, other variable, such as trust, expectations, values, status and compatibility, greatly influence the interpersonal aspects of communication. If the subordinate does not trust the boss, there will be ineffective communication. The same is true of the other variables mentioned. People perceive only what they expect to perceive; the unexpected may not be perceived at all. The growing generation gap can play havoc

with interpersonal communication; so can status differentials and incompatibilities of any

sort. Giving attention to, and doing something about, these interpersonal variables can

spell the difference between effective and ineffective communication.
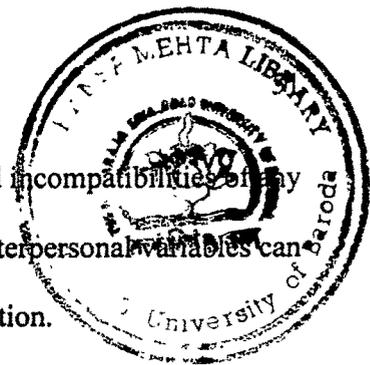
Interpersonal communication plays a central role in the organisational communication

process and is directly relevant to the study of organisational behaviour. It is given

further attention in this chapter in terms of upward and downward communication and

interactive communication.

Thus, at every level of modern society, communication is a problem. One of the

problems when applied to organisations has been the failure to recognise that

communications involves more than just linear information flows; it is a dynamic,

interpersonal process that involves behaviour exchanges. Knowledge of management

information systems, telecommunication technology and nonverbal approaches are

necessary background for understanding interpersonal and organisational communication.

The contemporary view is that communication is a dynamic, personal process. The three

major dimensions of communication from this perspective are superior-subordinates,

subordinate-initiated, and interactive processes. Each has varied purposes and methods.

The downward system is generally adequate in the superior-subordinate process, but

better techniques are needed to improve the upward and horizontal systems. All three

processes in organisations can greatly benefit from increased attention given to the

dynamic, interpersonal aspects of communication.

2.4.4. Favourable conditions for communication

i. There has to be a genuine desire to communicate. In other words, the sender of a message must be truly concerned to help the receiver as much as possible to understand the intended meaning. A seemingly overt message sometimes hides a covert intention. Sometimes, the sender even seems to making more effort to obscure than to reveal a meaning. Bureaucratic correspondence regularly provides examples of this.

ii. A climate of trust and openness is very important factor in establishing effective communication. This style of management is much more likely to create a sense of security and of absence of threat and hence to encourage the upward communication which managers need as a basis for sound decisions.

iii. There has to be awareness of the problems inherent in the individual's uniqueness of perception. One needs to deal with others not on the basis of his/her assumptions that the meanings are or should be the same as his/her own, but as far as possible, in terms of others' experience and possible expectations. For example, when communicating with young children, most of us recognise that we are dealing with people who have a very limited experience of the world and have a distinctive kind of perceptual framework. We naturally adapt our vocabulary and the way we present ideas to accommodate this limited experience and particular perception. The insight and sensitivity commonly shown in this situation is no different in principle from what is required in dealing with other adults. It seems that it can be achieved, but we frequently do not recognise that it is necessary.

iv. The more experience is shared, the better the chances of communication are likely to be. Obviously the patterns of general experience are often shaped by forces outside our control. Nevertheless, the point is very relevant to working life, where the more varied the managers' experience can be the easier it is likely to be for them to communicate with the different kinds of employee with whom they come into contact. A real-life example of this principle is seen in the insistence by police forces in the UK that everyone should begin on the bottom rung of the ladder as a police unstable. In this way, the Commissioner of Police knows from personal experience what it is like to pound the beat and to deal with the drunk and disorderly. He will, therefore, speak the same language as his subordinates, and is unlikely to have problems of credibility.

v. We need to check regularly the understanding of our messages and intentions. In particular, we need to know specifically what others have understood, rather than whether they have understood. This is why a climate of openness and trust is especially important so that subordinates will not feel threatened or inhibited from saying what they actually think and fee, rather than what they imagine the manager might like to hear, nor be afraid to admit that they have not understood the manager's message.

vi. Finally, sound communication also means listening. This is a skill that does not come naturally. It requires much concentration and practice. Too often we become occupied with our own thoughts and seek opportunities to interject. The bore is an extreme case of deficiency in this skill. Real listening is an important skill that all managers need to acquire if they are to be successful. It is especially important for

personnel managers who necessarily spend much of their time listening to the views, proposals, problems and complaints from line managers and their subordinate staff.

2.5   DECISION-MAKING IN ORGANISATION :

Decision-making is an important process for organisation development. In industry, effective decisions are aimed at achieving 'zero defects'. In education, this focus may be applied in order to create 'zero defections'.

In the present market-driven economy, marketing indicates when it comes to delivering services; successful organisations keep their customers coming back again and again. Those who cannot will have serious problems because the initial cost of getting a customer is usually so high that the company can profit only if it gets repeat business. In accomplishing this objective, many firms have made the decision to do whatever it takes to get the customer's business and keep it.

This effort often means delegating to the lowest operational level. The goal is to make the right decision for the customer, at any cost.

Decision-making is a process in any action, which is performed by management to achieve organisational objectives. Thus, decision-making is an organisational process because it transcends the individual and has an effect on organisational goals. First, the overall nature of decision-making is explored here. Then the models of behavioral decision-making are described. Next, the traditional and modern participative techniques are presented as behaviorally oriented decision techniques and then the creative process

and group decision-making are given attention. Finally, various levels of uncertainty in strategic Decision-making process are explained.

2.5.1. The nature of Decision-making

Decision-making is almost universally defined as choosing between alternatives. It is closely related to all the traditional management functions. For example, when a teacher or manager plans, organises and controls, he or she is making decisions.

The classical approach to decision making advocated by Fayol and Urvick were concerned with decision making process only to the extent that it affects delegation and authority, while Frederick W Taylor alluded to the scientific method only as an ideal approach to making decisions.

Decision making theory derives from the economists of the early industrial era. Whereas primitive man relied upon magic and superstition to guide him in making decisions, the early economists were more scientific in their approach. They were profoundly influenced by the changes associated with the industrial revolution, notably the impact of mechanisation and task division.

The superior efficiency of machines over traditional craft production stimulated the early economists to apply scientific and mechanistic principles to decision making. The key to the scientific approach is its reliance upon rationality, as distinct from instinct or

superstition. Rationality in the context of decision making means acting in a manner consistent with maximising gain. Ideally then, the decision-maker must function like a machine, unsusceptible to emotion or other outside influences.

Like most other aspects of modern organisation theory, the beginning of a meaningful analysis of the decision making process can be traced to Chester Barnard. In the "Functions of the Executive", Barnard gave a comprehensive analytical treatment of decision making and noted: "The process of decision...are largely techniques for narrowing choice."

Most discussions of the decision-making process break it down into a series of steps. For most part, the logic can be traced to the ideas developed by Herbert A Simon, the well-known Nobel Prize winning organisation and decision theorist, who conceptualises three major phases in the decision-making process:

1. Intelligence activity: Borrowing from the military meaning of intelligence, Simon describes this initial phase as consisting of searching the environment for conditions calling for decision-making.

2. Design activity: During the second phase of inventing, developing and analysing possible courses of action take place.

3. Choice activity: The third and final phase is the actual choice-selecting a particular course of action from among those available.

Closely related to these phases, but with an empirical basis, are the stages of decision making of Mintzberg and his colleagues;

1. The identification phase, during which recognition of a problem or opportunity arises and a diagnosis is made. It was found that severe, immediate problems did not have a very systematic, extensive diagnosis but that mild problems did.

2. The development phase, during which there may be a search for existing standard procedures or solutions already in place or the design of a new, tailor-made solution. It was found that the design process was a groping, trial-and-error process in which the decision-makers had only a vague idea of the optimum solution.

3. The selection phase, during which the choice of a solution is made. There are three ways of making this selection: by the judgement of the decision maker, on the basis of experience or intuition rather than logical analysis; by analysis of the alternatives on a logical, systematic basis; and by bargaining when the selection involves a group of decision makers and all the political maneuvering that this entails. Once the decision is formally accepted, an authorisation is made.

Whether expressed in Simon's or Mintzberg's phases, there seems to be identifiable, preliminary steps leading to the choice activity in decision making. Also, it should be noted that decision making is dynamic process, and there are many feedback loops in each of the steps. "Feedback loops can be caused by problems of timing, politics, disagreement among parties to decision making, inability to identify an appropriate

alternative or to implement the solution, turnover of people involved, or the sudden appearance of a new alternative". *

2.5.2 Decision Rationality:

The most often used definition of rationality in decision-making is that it is a means to an end. If appropriate means are chosen to reach desired goal, the decision is said to be rational. However, there are many complications to this simple test of rationality. To begin with, it is very difficult to separate means from ends because an apparent end may be only a means for some future end. This idea is commonly referred to as the means-ends chain or hierarchy. One way to clarify means-ends rationality is to attach appropriate qualifying adverse to the various types of rationality. Thus, objective rationality can be applied to decisions that maximise given values in a given situation. Subjective rationality might be used if the decision maximises attainment relative to knowledge of the given subject. Conscious rationality might be applied to decisions in which adjustment of means to ends is a conscious process. A decision is deliberately rational to the degree that the adjustment of means to ends has been deliberately sought by the individual or the organisation; a decision is organisationally rational to the extent that it is aimed at the organisation's goal; and a decision is personally rational if it is directed toward the individual's goals.

Reference: * Richard L Daft, Organisation Theory and Design, West, St.Paul, Minn., 1983, pp 357-358.

2.5.3. Models of Behavioral Decision-Making

There are many descriptive models of behavioral decision making. In effect, these have become models for much of management decision-making behavior. The models attempt to describe theoretically and realistically how practicing professionals make decisions. In particular, the models range from complete rationality to complete irrationality.

2.5.3.1.   The Econologic Model:

This model comes from classical economic model, in which the decision-maker is perfectly and completely rational in every way. Regarding decision-making activities, the following conditions are assumed:

(i)   The decisions will be completely rational in the means-ends sense.

(ii)   There is a complete and consistent system of preferences, which allow a choice among alternatives.

(iii)   There is complete awareness of all the possible alternatives.

(iv)   There are no limits to the complexity of computations that can be performed to determine the best alternatives.

(v)   Probability calculations are neither frightening nor mysterious.

With this almost infallible ability, the decision-maker always strives to maximise outcomes in the organisation and decisions will be directed to the point of maximum profit where marginal cost equals marginal revenue.

Most economists and quantitative decision theorists do not claim that this depiction is a realistic descriptive model of modern decision making behavior. But because this model and its accompanying quantitative methods have traditionally been embraced by the professional educational schools, many of today's professionals still equate 'good' decision-making with this approach. This may be dangerous and may be a leading cause of many problems. As Peters and Waterman observed: "The numerative, rationalist approach to management dominates the business schools. It seeks detached, analytical justification for all decisions. It is right enough to be dangerously wrong, and it has arguably led us seriously astray."*

2.5.3.2. The Social Model:

At the opposite extreme from the econologic model of psychology. Sigmund Freud presented humans as bundles of feelings, emotions and instincts, with their behavior guided largely by their unconscious desires. Obviously, if this were an accurate description, people would not be capable of making effective decisions.

Social influences have a significant impact on decision-making behaviour. Social pressures and influences may cause professionals to make irrational decisions.

Reference :   *Thomas J Peters and Robert H Waterman, Jr., In Search of Excellence : Lessons from America's Best-Run Companies, Harper & Row, New York, 1982, p.xxiii

2.5.4. Organisation structure and Decision making

The fragmentary nature of what managers do leads to the suggestions that they have to perform a wide variety of roles. Mintzberg suggests that there are ten managerial roles, which can be grouped into three areas; interpersonal, informational and decisional.

Interpersonal roles cover the relationships that a manager has to have with others. The three roles within this category are figurehead, leader and liaison. Managers have to act as figureheads because of their formal authority and symbolic position, representing their organisations. As leaders, managers have to bring together the needs of an organisation and those of the individuals under their command. The third interpersonal role that of liaison, deals with the horizontal relationships which work-activity studies have shown to be important for a manager. A manager has to maintain a network of relationships outside the organisation.

Managers have to collect, disseminate and transmit information and have three corresponding informational roles, namely monitor, disseminator and spokesman. A manager is an important figure in monitoring what goes on in the organisation, receiving information about both internal and external events, and transmitting it to others. This process of transmission is the dissemination role, passing on information of both a factual and value kind. A manager often has to give information concerning the organisation to outsiders, taking on the role of spokesman to both the general public and those in positions of influence.

As with so many writers about management, Mintzberg regards the most crucial part of managerial activity as that concerned with making decisions. The four roles that he places in this category are based on different classes of decision, viz. Entrepreneur, disturbance handler, resource allocator and negotiator. As entrepreneurs, managers make decisions about changing what is happening in an organisation. They may have to both initiate change and to take an active part in deciding exactly what is to be done. In principle, they are acting voluntarily. This is very different from their role as a disturbance handler, where managers have to make decisions, which arise from events beyond their control and unpredicted. The ability to react to events as well as to plan activities is an important managerial skill in Mintzberg's eyes.

The resource allocation role of a manager is central to much organisational analysis. Clearly a manager has to make decisions about the allocation of money, people, equipment, time and so on. Mintzberg points out that in doing so a manager is actually scheduling time, programming work and authorizing actions. Mintzberg puts the negotiation role in the decisional category because it is 'resource trading in real time'. A manager has to negotiate with others and in the process be able to make decisions about the commitment of organisational resources.

According to Mintzberg, 'the management school has been more effective at training technocrats to deal with structured problems than managers to deal with unstructured ones.'

Nor has management teaching given the practitioner a ready way of understanding the design of organisations. Mintzberg sets out to devise such a way. As he observes it, there are five basic designs whose features recur in published research. He calls them the Simple Structure, the Machine Bureaucracy, the Professional Bureaucracy, the Divisionalised Form, and the Adhocracy.

The primary feature which distinguishes each from the others is that within each, one from among five basic parts of organisation predominates (it is repetition of the number five that prompts Mintzberg to call his 1983 book, "Structure in Fives"). In a Simple Structure, the key part that predominates is the 'strategic apex' which in a manufacturer, for example, would be the Board of Directors, President or Chief Executive and their personal staff. In a Machine Bureaucracy, it is the 'technostructure', which would include the personnel in planning, finance, training, operations research and work-study, and production scheduling. The key part in a Professional Bureaucracy is the 'operating core' those at the working base of the organisation. While in a manufacturer this would be the buyers, machine operators, salespeople and dispatchers, in a Professional Bureaucracy it might be doctors and nurses (in a hospital) or teaching staff (in a college). The 'middle line' are the key in the Divisionalised Form of organisation, being the personnel who 'manage managers' in the hierarchy between the strategic apex and the operating core. In the manufacturing, these would include the heads of the production and sales functions, and the managers and supervisors beneath them. Finally, in an Adhocracy the 'support staff' are the key part. In a typical manufacturer they might be in

public relations, industrial relations, pricing, payroll, even the cafeteria, as well as in research and development but in an Adhocracy the focus is upon the latter, the 'R&D'.

The first, the Simple Structure, in which the strongest pull is by the strategic apex towards centralisation, is as simple as its name indicates. It has little or no technostructure, few support staff, minimal differentiation between departments and a small hierarchy. Co-ordination is by direct supervision, downwards from the strong apex where power is in the hands of the chief executive; so it does not need formal planning or training or similar procedures, and can be flexible and 'organic'. The conditions favouring this Simple Structure are those of the classic entrepreneurial owner – managed firm. A small organisation is a simple yet dynamic environment, which can be understood by one leading individual. 'Most organisations pass through the Simple Structure in their formative years', and some stay small enough to continue it. They could be as diverse as an automobile dealership, a retail store, a brand-new government department, or a vigorous manufacturer on a small scale.

The Machine Bureaucracy is far more secure. It does not depend on a single person. The strongest pull on it is from its technostructure, the planners, financial controllers, production schedulers, and their kind. They pull towards standardisation. Once work has been divided into standard routine tasks they can control it through formalised rules and regulations. Control is almost an obsession. The Machine Bureaucracy is second only to the Simple Structure in centralisation but in it power is divided between the strategic apex and the technostructure. A post office, a steel manufacturer, a prison, a major airline, a

vehicle assembler, are all like this. They have the conditions favouring this design, mainly that they are older larger organisations carrying out repetitive work in stable environments, probably themselves subject to control from a remote corporation head office or government.

The third kind of configuration or design, the Professional Bureaucracy, is pulled by its operating core towards professionalised autonomy. That is, it is dominated by highly trained professional specialists. These have to be employed because the work is too complex to be controlled and co-ordinated any other way. So it is broken up into specialisms, and people are hired to do it who already have standardized skills. That means professionals already trained and indoctrinated who can be relied on to do what has to be done. This is the situation in universities, hospitals, schools, accountancy firms, social work agencies and some firms that employ highly skilled craftspeople (e.g. fashion textiles designing). Since others without the training cannot interfere, the professionals are relatively independent. Their working autonomy is usually reinforced by a high demand for the service they give. Hence whilst the Machine Bureaucracy is run by hierarchical authority, the Professional Bureaucracy emphasizes the power of expertise. While the Machine Bureaucracy sets its own standards, the bureaucratic administrative framework of a Professional Bureaucracy accepts standards set externally by professional bodies such as the medical and accounting institutions.

This design of organisation is uniquely democratic, but it suffers from difficulties of co-ordination and jurisdiction. Who should teach the statistics course in the management,

the staff of the mathematics department or the business department? And who can declare a professor incompetent, and what then can be done about it?

The Divisionalised Form is most widely used by large private industrial corporations, but it can also be seen in those American universities that have several campuses, or in health administrations which control several hospitals, and generally in socialist economies where government ministries control numbers of enterprises.

Mintzberg suspects that though the Divisionalised Form is a fashionable sign of the times, it may be the most vulnerable of the five designs to legal and social changes.

In contrast, a space agency, a factory making complex prototypes, or a petrochemicals company, is likely to be designed as an Adhocracy. There are two variants of Adhocracy. An Operating Adhocracy works directly for clients, as in an advertising agency, whereas an Administrative Bureaucracy serves itself as did the National Aeronautics and Space Agency, NASA, in building up American space exploration. Yet 'if Simple Structure and Machine Bureaucracy were yesterday's structures, and Professional Bureaucracy and the Divisionalised Form are today', then Adhocracy is clearly tomorrow's.

2.5.5. Strategic Decision making and uncertainty

In one of the articles in Harward Business Review, titled " Strategy under Uncertainty " Hugh Courtney , Jane Kirkland and Patrick Viguerie of McKinsey Company have

brought about the following aspects related to decision-making in an environment characterized by uncertainty.

2.5.5.1. *Four levels of Uncertainty*

Even the most uncertain business environments contain a lot of strategically relevant information. First, it is often possible to identify clear trends, such as market demographics, that can help define potential demand for future producers or services. Second, there is usually a host of factors that are currently unknown but that are in fact knowable - that could be known if the right analysis were done. Performance attributes for current technologies, elasticities of demand for certain stable categories of products, and competitors' capacity-expansion plans are variables that are often unknown, but not entirely unknowable.

The uncertainty that remains after the best possible analysis has been done is what they call residual uncertainty - for example, the outcome of an ongoing regulatory debate or the performance attributes of a technology still in development. But often, quite a bit can be known about even those residual uncertainties. In practice, they have found that the residual uncertainty facing most strategic decision-makers fall into one of four broad levels :

Level 1 : A Clear-Enough Future. At level 1, managers can develop a single forecast of the future that is precise enough for strategy development. Although it will be inexact

to the degree that all business environments are inherently uncertain, the forecast will be sufficiently narrow to point to a single strategic direction. In other words, at level 1, the residual uncertainty is irrelevant to making strategic decisions.

Consider a major airline trying to develop a strategic response to the entry of a low-cost, no frills competitor into one of its hub airports. Should it respond with a low-cost service of its own? Should it cede the low-cost niche segments to the new entrant? Or should it compete aggressively on price and service in an attempt to drive the entrant out of the market?

To make that strategic decision, the airline's executives need market research on the size of different customer segments and the likely response of each segment to different combinations of pricing and service. They also need to know how much it costs the competitor to serve, and how much capacity the competitor has for, every route in question. Finally, the executives need to know the new entrant's competitive objectives to anticipate how it would respond to any strategic moves their airline might make. In today's U.S. airline industry, such information is either known already or is possible to know. It might not be easy to obtain - it might require new market research, for example - but it is inherently knowable. And once that information is known, residual uncertainty would be limited, and the incumbent airline would be able to build a confident business case around its strategy.

Level 2: Alternate Futures. At level 2, the future can be described as one of a few alternate outcomes, or discrete scenarios. Analysis cannot identify which outcome will occur, although it may help establish probabilities. Most important, some, if not all, elements of the strategy would change if the outcome were predictable.

Many businesses facing major regulatory or legislative change confront level 2 uncertainty. Consider U.S. long-distance telephone providers in late 1995, as they began developing strategies for entering local telephone markets. By late 1995, legislation that would fundamentally deregulate the industry was pending in Congress, and the broad form that new regulations would take was fairly clear to most industry observers. But whether or not the legislation was going to pass and how quickly it would be implemented in the event it did pass were uncertain. No amount of analysis would allow the long-distance carriers to predict those outcomes, and the correct course of action - for example, the timing of investments in network infrastructure - depended on which outcome occurred.

In another common level 2 situation, the value of a strategy depends mainly on competitors' strategies, and those cannot yet be observed or predicted. For example, in oligopoly markets, such as those for pulp and paper, chemicals, and basic raw materials, the primary uncertainty is often competitors' plans for expanding capacity: Will they build new plants or not? Economies of scale often dictate that any plant built would be quite large and would be likely to have a significant impact on industry prices and profitability. Therefore, any one company's decision to build a plant is often contingent

on competitors' decisions. This is a classic level 2 situation: The possible outcomes are discrete and clear. It is difficult to predict which one will occur. And the best strategy depends on which one does occur.
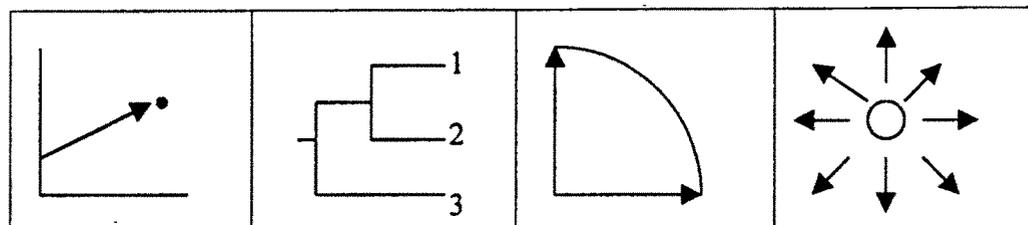
Level 3: A Range of Futures. At level 3, a range of potential futures can be identified. That range is defined by a limited number of key variables, but the actual outcome may lie anywhere along a continuum bounded by that range. There are no natural discrete scenarios. As in level 2, some, and possibly all, elements of the strategy would change if the outcome were predictable.

Companies in emerging industries or entering new geographic markets often face level 3 uncertainty. Consider a European consumer-goods company deciding whether to introduce its products to the Indian market. The best possible market research might identify only a broad range of potential customer-penetration rates - say, from 10% to 30% - and there would be no obvious scenario within that range. Such a broad range of estimates would be common when introducing completely new products and services to a market, and therefore determining the level of latent demand is very difficult. The company entering India would be likely to follow a very different and more aggressive entry strategy if it knew for certain that its customer penetration rates would be closer to 30% than to 10%.

Analogous problems exist for companies in fields driven by technological innovation, such as the semiconductor industry. When deciding whether to invest in a new

technology, producers can often estimate only a broad range of potential cost and performance attributes for the technology, and the overall profitability of the investment depends on those attributes.

How To Use Four Levels Of Uncertainty

A Clear Enough Future	Alternate Futures	A range of Futures	True Ambiguity
What can be known?	• A single forecast precise enough for determining strategy	• A few discrete outcomes that define the future	• A range of possible outcomes, but no natural scenarios	• No basis to forecast the future
Analytic Tools	• Traditional strategy tool kit	• Decision analysis • Option valuation models • Game theory	• Latent-demant research • Technology forecasting • Scenario planning	• Analogies and pattern recognition • Nonlinear dyanmic models
Examples	• Strategy against low-cost airline entrant	• Long-distance telephone carriers' strategy to enter deregulated local-service market • Capacity strategies for chemical plants	• Entering emerging markets, such as India • Developing or acquiring emergingh technologies in consumer electronics	• Entering the market for consumer multimedia applications • Entering the Russian market in 1992

Figure 2.4.

Level 4: True Ambiguity. At level 4, multiple dimensions of uncertainty interact to create an environment that is virtually impossible to predict. Unlike in level 3 situations, the range of potential outcomes cannot be identified, let alone scenarios within that range. It might not even be possible to identify much less predict, all the relevant variables that will define the future.

Level 4 situations are quite rare, and they tend to migrate toward one of the other levels over time. Nevertheless, they do exist. Consider a telecommunications company

deciding where and how to compete in the emerging consumer-multimedia market. It is confronting multiple uncertainties concerning technology, demand and relationships between hardware and content providers, all of which may interact in ways so unpredictable that no plausible range of scenarios can be identified.

Companies considering making major entry investments in post-Communist Russia in 1992 faced level 4 uncertainty. They could not outline the potential laws or regulations that would govern property rights and transactions. That central uncertainty was compounded by additional uncertainty over the viability of supply chains and the demand for previously unavailable consumer goods and services. And shocks such as a political assassination or a currency default could have spun the whole system toward completely unforeseen outcomes.

Those examples illustrate how difficult strategic decisions can be at level 4, but they also underscore their transitory nature. Greater political and regulatory stability has turned decisions about whether to enter Russian markets into level 3 problems for the majority of industries today. Similarly, uncertainty about strategic decisions in the consumer multimedia will migrate to level 3 or to level 2 as the industry begins to take shape over the next several years.

2.6. LEADERSHIP ROLES OF EDUCATION AND INDUSTRY MANAGERS:

The leadership aspects in an organisation reflect and influence the Communication and Decision making processes. Though there are several dimensions and variables which are important for the study of leadership, two main dimensions relevant to this study in the present context are explained on the basis of Harward Business Review articles.

Daniel Goleman, the co-chairman of the Consortium for Research on Emotional Intelligence in Organisations (Rutgers University's Graduate School of Applied and Professional Psychology in Piscataway, New Jersey) examines 'emotional intelligence' in an article - " What makes a leader". The development of 'emotional intelligence' is very much required for Educational and Industry managers.

2.6.1. Emotional Intelligence

Most large companies today have employed trained psychologists to develop what are known as "competency models" to aid them in identifying, training and promoting likely stars in the leadership firmament. The psychologists have also developed such models for lower-level positions. And in recent years, the author had analysed competency models from 188 companies, most of which were large and global and included the likes of Lucent Technologies, British Airways and Credit Suisse.

Other researchers have confirmed that emotional intelligence not only distinguishes outstanding leaders but can also be linked to strong performance. The findings of the late David McClelland, the renowned researcher in human and organisational behaviour are a good example. In a 1996 study of a global food and beverage company, McClelland found that when senior managers had a critical mass of emotional intelligence capabilities, their divisions outperformed yearly earnings goals by 20%. Meanwhile, division leaders without that critical mass underperformed by almost the same amount. McClelland's findings, interestingly, held as true in the company's U.S. divisions as in its divisions in Asia and Europe.

The Five Components of Emotional Intelligence at Work

	Definition	Hallmarks
Self-Awareness	The ability to recognise and understand your moods, emotions, and drives, as well as their effect on others	Self-confidence Realistic self-assessment Self-deprecating sense of humour
Self-Regulation	The ability to control or redirect disruptive impulses and moods The propensity to suspend-judgement to think before acting	Trustworthiness and integrity Comfort with ambiguity Openness to change
Motivation	A passion to work for reasons that go beyond money or status A propensity to pursue goals with energy and persistence	Strong drive to achieve Optimism, even in the face of failure Organisational commitment
Empathy	The ability to understand the emotional make-up of other people Skill in treating people according to their emotional reactions	Expertise in building and retaining talent Cross-culture sensitivity Service to clients and customers
Social Skill	Proficency in managing relationships and building networks An ability to find common ground and build rapport	Effectiveness in leading change Persuasiveness Expertise in building and leading teams

Table 2.3.

2.6.2. Adaptive Challenge

Organisations today face challenges similar to the ones confronting Pritchard and his

doctor. They face adaptive challenges. Changes in societies, markets, customers,

competition and technology around the globe are forcing organisations to clarify their

values, develop new strategies and learn new ways of operating. Often the toughest task for leaders in effecting change is mobilising people throughout the organisation to do adaptive work.

Mobilising an organisation to adapt its behaviours in order to thrive in new business environments is critical. Without such change, any company today would falter. Indeed, getting people to do adaptive work is the mark of leadership in a competitive world.

Drawing on their experience with managers from around the world, Ronald A Heifetz and Donald Laurie offer six principles for leading adaptive work: "getting on the balcony", identifying the adaptive challenge, regulating distress, maintaining disciplined attention, giving the work back to people, and protecting voices of leadership from below. They illustrate those principles with an example of adaptive change at KPMG Netherlands, a professional-services firm.

Get On the Balcony

Business leaders have to be able to view patterns as if they were on a balcony. It does them no good to be swept up in the field of action. Leaders have to see a context for change or create one. They should give employees a strong sense of the history of the enterprise and what's good about its past, as well as an idea of the market forces at work today and the responsibility people must take in shaping the future. Leaders must be able to identify struggles over values and power, recognise patterns of work avoidance and watch for the many other functional and dysfunctional reactions to change.

Identify the Adaptive Challenge

When businesses cannot learn quickly to adapt to new challenges, they are likely to face their own form of extinction.

Consider the well-known case of British Airways. Having observed the revolutionary changes in the airline industry during the 1980s, then chief executive Colin Marshall clearly recognised the need to transform an airline nicknamed Bloody Awful by its own passengers into an exemplar of customer service.

To lead British Airways, Marshall had to get his executive team to understand the nature of the threat created by dissatisfied customers: Did it represent a technical challenge or an adaptive challenge? Would expert advice and technical adjustments within basic routines suffice, or would people throughout the company have to learn new ways of doing business, develop new competencies, and begin to work collectively?

Marshall and his team set out to diagnose in more detail the organisation's challenges. They looked in three places. First, they listened to the ideas and concerns of people inside and outside the organisation - meeting with crews on flights, showing up in the 350-person reservation center in New York, wandering around the baggage-handling area in Tokyo, or visiting the passenger lounge in whatever airport they happened to be in. Their primary questions were, Whose values, beliefs, attitudes, or behaviours would have

to change in order for progress to take place? What shifts in priorities, resources and power were necessary? What sacrifices would have to be made and by whom?

Second, Marshall and his team saw conflicts as clues - symptoms of adaptive challenges. The way conflicts across functions were being expressed were mere surface phenomena: the underlying conflicts had to be diagnosed. Disputes over seemingly technical issues such as procedures, schedules, and lines of authority were in fact proxies for underlying conflicts about values and norms.

Third, Marshall and his team held a mirror up to themselves, recognising that they embodied the adaptive challenges facing the organisation. Early in the transformation of British Airways, competing values and norms were played out on the executive team in dysfunctional ways that impaired the capacity of the rest of the company to collaborate across functions and units and make the necessary trade-offs. No executive can hide from the fact that his or her team reflects the best and the worst of the company's values and norms, and therefore provides a case in point for insight into the nature of the adaptive work ahead.

Regulate Distress

Adaptive work generates distress. Before putting people to work on challenges for which there are no ready solutions, a leader must realise that people can learn only so much so fast. At the same time, they must feel the need to change as reality brings new challenges. They cannot learn new ways when they are overwhelmed, but eliminating stress altogether removes the impetus for doing adaptive work. Because a leader must

strike a delicate balance between having people feel the need to change and having them feel overwhelmed by change; leadership is a razor's edge.

A leader must attend to three fundamental tasks in order to help maintain a productive level of tension. Adhering to these tasks will allow him or her to motivate people without disabling them.

First, a leader must create what can be called a holding environment. To use the analogy of a pressure cooker, a leader needs to regulate the pressure by turning up the heat while also allowing some steam to escape. If the pressure exceeds the cooker's capacity, the cooker can blow up. However, nothing cooks without some heat.

Second, a leader is responsible for direction, protection, orientation, managing conflict and shaping norms. (See the table "Adaptive Work Calls for Leadership".) Fulfilling these responsibilities is also important for a manager in technical or routine situations. But a leader engaged in adaptive work uses his authority to fulfill them differently. A leader provides direction by identifying the organisation's adaptive challenge and framing the key questions and issues.

Adaptive Work Calls for Leadership		
Responsibilities	Situation	
	Technical or Routine	Adaptive
Direction	Define problems and provide solutions	Identify the adaptive challenge and frame key questions and issues
Protection	Shield the organisation from external threats	Let the organisation feel external pressures within a range it can stand
Orientation	Clarify roles and responsibilities	Challenge current roles and resist pressure to define new roles quickly
Managing Conflict	Restore order	Expose conflict or let it emerge
Shaping Norms	Maintain norms	Challenge unproductive norms

Table 2.4.

Third, a leader must have presence and poise; regulating distress is perhaps a leader's most difficult job. The pressures to restore equilibrium are enormous. Just as molecules bang hard against the walls of a pressure cooker, people bang up against leaders who are trying to sustain the pressures of tough, conflict-filled work. Although leadership demands a deep understanding of the pain of change - the fears and sacrifices associated with major readjustment - it also requires the ability to hold steady and maintain the tension. Otherwise, the pressure escapes and stimulus for learning and change is lost.

Maintain Disciplined Attention

Different people within the same organisation bring different experiences, assumptions, values, beliefs and habits to their work. This diversity is valuable because innovation and learning are the products of differences. No one learns anything without being open

to contrasting points of view. Yet managers at all levels are often unwilling - or unable - to address their competing perspectives collectively. They frequently avoid paying attention to issues that disturb them. They restore equilibrium quickly, often with work avoidance maneuvers. A leader must get employees to confront tough trade-offs in values, procedures, operating styles, and power.

Because work avoidance is rampant in organisations, a leader has to counteract distractions that prevent people from dealing with adaptive issues. Scapegoating, denial, focusing only on today's technical issues, or attacking individuals rather than the perspectives they represent - all forms of work avoidance - are to be expected when an organisation undertakes adaptive work. Distractions have to be identified when they occur so that people will regain focus.

Give the Work Back to People

Everyone in the organisation has special access to information that comes from his or her particular vantagepoint. Everyone may see different needs and opportunities. People who sense early changes in the marketplace are often at the periphery, but the organisation will thrive if it can bring that information to bear on tactical and strategic decisions. When people do not act on their special knowledge, businesses fail to adapt.

Getting people to assume greater responsibility is easy. Not only are many lower-level employees comfortable being told what to do, but many managers are accustomed to treating subordinates like machinery requiring control. Letting people take initiative in

defining and solving problems means that management needs to learn to support rather than control. Workers, for their part, need to learn to take responsibility.

A leader also must develop collective self-confidence. Again, Carizon said it well : "People aren't born with self-confidence. Even the most self-confident people can be broken. Self-confidence comes from success, experience and the organisation's environment. The leader's most important role is to instill confidence in people. They must dare to take risks and responsibility. You must back them up if they make mistakes."

Protect Voices of Leadership from Below

Giving a voice to all people is the foundation of an organisation that is willing to experiment and learn. But, in fact, whistle-blowers, creative deviants, and other such original voices routinely get smashed and silenced in organisational life. They generate disequilibrium, and the easiest way for an organisation to restore equilibrium is to neutralise those voices, sometimes in the name of teamwork and "alignment".

The voices from below are usually not as articulate as one would wish. People speaking beyond their authority usually feel self-conscious and sometimes have to generate "too much" passion to get themselves geared up for speaking out. Of course, that often makes it harder for them to communicate effectively. They pick the wrong time and place, and often bypass proper channels of communication and lines of authority. But buried inside a poorly packaged interjection may lie an important intuition that needs to be teased out

and considered. To toss it out for its bad timing, lack of clarity, or seeming unreasonableness is to lose potentially valuable information and discourage a potential leader in the organisation.

Leaders must rely on others within the business to raise questions that may indicate an impending adaptive challenge. They have to provide cover to people who point to the internal contradictions of the enterprise. Those individuals often have the perspective to provoke rethinking that people in authority do not. Thus, as a rule of thumb, when authority figures feel the reflexive urge to glare at or otherwise silence someone, they should resist. The urge to restore social equilibrium is quite powerful, and it comes on fast. One has to get accustomed to getting on the balcony, delaying the impulse, and asking, What really is this guy talking about? Is there something we're missing?

Leadership, as seen in this light, requires a learning strategy. A leader, from above or below, with or without authority, has to engage people in confronting the challenge, adjusting their values changing perspectives, and learning new habits. To an authoritative person who prides himself on his ability to tackle hard problems, this shift may come as a rude awakening. But it also should ease the burden of having to know all the answers and bear all the load. To the person who waits to receive either the coach's call or "the vision" to lead, this change may also seem a mixture of good news and bad news. The adaptive demands of our time require leaders who take responsibility without waiting for revelation or request. One can lead with no more than a question in hand.

2.7. CONCLUSION:

The review of literature related to the study clearly arrive at certain conclusions as follows. In the present fast changing socio-economic and techno-commercial scenario, the organisations should develop a competitive edge by forming clusters for better co-ordination and optimum resource utilisation. Co-ordination between policies and practices of education, industry and government sectors are important for improving the productivity of a nation. National policies of Education should provide enough importance for administrative and management aspects of each and every educational institution imparting different programs at different levels. The literature on Communication and Decision-making practices clearly suggest that various models of these practices have strengths as well as constraints for organisations of different types. And application of various aspects of the practices from one sector to another have to be selective for better results and they much reflect the personality characteristics and preparedness of leadership in the organisation.