CHAPTER 4

DATA ANALYSIS, INTERPRETATION AND DISCUSSION

4.1 INTRODUCTION:

The data collected from the respondents using questionnaire and interview schedule have been analysed and interpreted in the following sequence:

- In the first part, a brief idea about the personal profile of the respondents is analysed using tables and graphs.

- In the second part, various dimensions of communication and decision-making practices in Industry and Educational Institutions as perceived by the respondents have been analysed and discussed.

- The bottlenecks of communication and decision-making practices in industry and Educational Institutions as evaluated by the respondents have been analysed and interpreted in the third part.

The meaning and relevance of all variables or dimensions of Communication and Decision making, on which the study was focussed, are explained in tables preceded by the analysis and discussion of the data collected.

The Communication and Decision making processes in organisation have innumerable variables. Taking into account the feasibility of the study and achievement of the stated objectives, only those variables, which have direct significance to the objectives of the study were considered. Further, most of the identified variables have impact on people who constitute and run the organisation and who are very much subject to these processes in the organisation.

4.2 PERSONAL PROFILE OF THE RESPONDENTS

4.2.1 Distribution of respondents by age

EDUCATION

AGE CATEGORY	NUMBER OF RESPONDENTS.	%
30- 35 years	20	21%
36 - 40 years	34	36%
41 - 45 years	26	27%
45 years & above	15	16%
Total	95	100%

Table 4.1

INDUSTRY

AGE CATEGORY	NUMBER OF RESPONDENTS.	%
30- 35 years	5	6%
36 - 40 years	35	45%
41 - 45 years	15	19%
45 years & above	23	30%
Total	78	100%

Table 4.2.

The tables above clearly show that majority of the respondents from Education and Industry are between 36-40 years.

4.2.2. Distribution of the respondents by Educational qualification

EDUCATION

EDUCATIONAL QUALIFICATION	NUMBER OF RESPONDENTS.	%
Graduate Professional	29	30%
Post Graduate / Professional	66	70%
Doctorate	--	--
Total	95	100%

Table 4.3

INDUSTRY

EDUCATIONAL QUALIFICATION	NUMBER OF RESPONDENTS.	%
Graduate Professional	--	--
Post Graduate / Professional	36	46%
Doctorate	42	64%
Total	78	100%

Table 4.4

A study of this nature obviously needs to be undertaken in a research setting dominated by educated respondents. The tables above and attached graph indicate that all respondents in industry are professionally qualified and majority of the respondents from education are either professionally qualified or doctorates.

4.2.3. Distribution of the respondents by work experience

EDUCATION

WORK EXPERIENCE	NUMBER OF RESPONDENTS.	%
Less than 5 years	5	6%
5 - 10 years	10	13%
More than 10 years	63	81%
Total	78	100%

Table 4.5

INDUSTRY

WORK EXPERIENCE	NUMBER OF RESPONDENTS.	%
Less than 5 years	24	25%
5 - 10 years	54	57%
More than 10 years	17	18%
Total	95	100%

Table 4.6

As the study is focused on opinions from the respondents based on their experience in their chosen profession, it is pertinent that the respondents should have a reasonable experience. The tables above and attached graphs (Appendices 5 and 6) indicate that majority of the respondents have more than five years experience.

4.2.4. Distribution of Respondents by functional areas of work

EDUCATION

FUNCTIONAL AREA	NUMBER OF RESPONDENTS.	%
Management disciplines: Finance, Marketing, Project, Human Resources, Information technology	33	42%
Engineering disciplines: Mechanical, Electrical, Civil, Technology,	28	36%
Others: Research, Administration etc.	17	22%
Total	78	100%

Table 4.7

INDUSTRY

FUNCTIONAL AREA	NUMBER OF RESPONDENTS.	%
Engineering: Mechanical, Electrical, Civil, Systems, Instruments	32	34%
Technology: Research & Development, Technical Services, Quality Assurance	44	46%
General Management and Administration	19	20%
Total	95	100%

Table 4.8

The tables 4.7. and 4.8. clearly establish required relation between respondents in Education and respondents in Industry, relevant to this study. Since the study concentrated on professionals in both the sectors having experience and exposure in Management and Engineering disciplines, the data in the tables above ensure appropriate consistency of responses from the respondents on different variables related to the problem of the study.

4.3   COMMUNICATION PRACTICES

4.3.1. Structural aspects of Communication Process :

The importance of communication in organisation, communication objectives, types and channels of communication and adequacy of the existing systems of communication were the main dimensions included for understanding the structural aspects of communication process. These dimensions are explained in table 4.9 in detail.

4.3.1.1. 100% of the respondents perceive communication process as extremely important in an organisation.

4.3.1.2 . 75% of the respondents in industry recognise the information flow as the main objective of communication system in an organisation. Majority of the respondents from Education (85%) also perceive the important role of information flow in an organisation.

4.3.1.3 In both, educational institution and industry, communication process happens upward, downward and criss-cross. Respondents in education point out that

communication in education most of the time, is characterized by sharing of information among people at different levels. While in industry, this sharing rarely happens. Most of the time, it is upward (reporting) or downward (instructions).

Structural Aspects of Communication

	Dimension	Meaning and Relevance
1	Importance of Communication	In behavioral science research, to know the subjects' basic awareness about the focus of the research is basic requirement. The kind of importance given to communication among various processes of the organisation is part of structural aspects of communication.
2	Objectives of Communication	Objectives/goals are part of structure of any organisational process. In this research context, communication process objectives include linking other processes providing direction towards achievement of organisational goals.
3	Types and channels of Communication	This dimension's relevance to the structural aspects of communication is evident in fastness/speed and accuracy in organisational information flow.
4	Adequacy of present Communication system	One of the best methods to find the strengths and constraints of any organisational processes is introspection i.e. to evaluate whether the process is suitable and dependable for a period of time. From this standpoint, it is needed to understand the adequacy of the present systems of communication.

Table 4.9

4.3.1.4 .The channels/media used for communication in Educational institutions and industry are more or less the same such as memo, circular, bulletins (written), meetings, telephone (oral), etc. Utilisation of computers also recognised as a major medium for communication in education and industry.

75% to 80% of the respondents in education and industry pointed out that formal channels are used more for communication.

4.3.1.5. 65% of the respondents in education perceive that the present system of communication is inadequate for the development of the organisation. Absence of adequate resources is seen as major cause, apart from unfamiliarity with the professionals on the latest developments in information technology. 60% of the respondents in industry point out that the present communication practice in their organisation is not sufficient for development of the organisation. They are of the opinion that 'faster the information flow, faster will be the development of the enterprise'. According to them, the industry is giving lot of emphasis on latest information technology communication tools.

4.3.2 Communication and Organisation climate :

The concept of Organisation climate has many dimensions from the structural, behavioural and other perspectives. Some of the important dimensions from Communication system's view are reliability of information, freedom for people to express their ideas, sense of belongingness and mutual trust and confidence. These dimensions are explained in table 4.10.

4.3.2.1. 75% of the respondents in education feel free to discuss or share problems with their colleagues or senior faculty members. 80% of the respondents in industry feel that the present communication practices in their organisation do not encourage them for free discussions with their superiors.

Communication and Organisation climate

	Dimension	Meaning and Relevance
1	Reliability of information	Dependability aspect in the information system is vital for understanding the prevalant climate of the organisation. Development of organisation has its fundamental needs in the conducive climate.
2	Freedom to express one's ideas	To what extent the people in the organisation enjoy freedom to express their feelings and ideas has considerable impact on the climate of the organisation.
3	Sense of belongingness	Much of the existance of an ideal organisational environment in any sector owe to the sense of belongingness of its people. This is a fundamental to establish, maintain and develop appropriate organisational working atmosphere.
4	Building mutual trust and Confidence	Effective communication systems in an organisation, no doubt, help in building trust and confidence among people. To carry out various tasks and achieve the goals of organisation, an organisational climate built on mutual trust and confidence is essential.

Table 4.10

4.3.2.2 . More than 70% of the respondents in education perceive that the suggestion/ information given by junior colleagues are given due importance in meetings and discussions. 65% of the respondents in industry perceive that the information given by subordinates are many a time cross-checked by the superiors before giving due importance.

4.3.2.3 . 85% of the respondents in education feel that the organisation provides them enough freedom to work on their own within certain set parameters/standards. 80% of the respondents in industry also feel that they have freedom to work on their own but restricted to small area.

4.3.2.4 About the trust and confidence in junior colleagues in education and in subordinates in industry, 75% of the respondents are not very clear or unsure. Majority of the respondents perceive this aspect as situational and vary from person to person.

4.3.3 Communication and Organisational effectiveness:

Organisational effectiveness and organisational efficiency are two most common concepts used while describing the impact of Communication in organisations. An organisation can be said to be effective when it does the right thing at the right time in the right way and achieve the right goals. Towards this end the communication variables such as quality of information, clarity of information, operating standards and right quantity of reliable information have considerable impact. These variable are explained in detail in table 4.11.

4.3.3.1 . 65% of the respondents in education opined that they get useful and relevant information that enhances their effectiveness in the organisation. 35% of the respondents have not evaluated the information that they receive from this dimension. In industry, 75% of the respondent's view that the information received from various part of the organisation are useful and relevant for organisational effectiveness.

Communication and Organisational Effectiveness

	Dimension	Meaning and Relevance
1	Quality of information	The purposefulness of information, appropriate medium used for communication and relevance to the desired objective are the main characteristics of quality information. Quality information systems have considerable impact on the effectiveness of an organisation.
2	Clarity of information	Preciseness of data, appropriateness of language, objectivity in ideas expressed are some of the basic aspects which contribute to clarity of information.
3	Organisational operating standards	The organisational effectiveness can be observed from the standards at which it operates in the environment. The quality of students in educational institution, the consistency of policies and procedures etc, reflect the standards.
4	Excess information	Timeliness of dissemination, accuracy of content and magnitude of information have importance in organisational dimensions. Excess information might have adverse effect on the organisation's development.

Table 4.11.

4.3.3.2 . 60% of the respondents in education feel that the employees in their organisation do get adequate information related to their work and the quality and quantity are also adequate. 70% of the respondents in industry perceive that the quality and quantity of work related information is not adequate and many a times they have to wait for more authentic information.

4.3.3.3 . 75% of the respondents in education as well as in industry opined that the written directions and reports in their respective organisations are clear and to the point.

4.3.3.4 Majority of the respondents in education strongly agree that syllabi is adequate and the students get graduated from their institutions could find job without much difficulty. Almost all respondents in industry perceive that the products of the company maintain highest standard in technology

4.3.4. Behavioral aspects of Communication Process :

In fact, the behavioural aspects dominate the Communication in organisations. The communication process actually happens in the minds of people in the organisation. From this point of view, interaction among people in the organisation, how people estimate or evaluate the information received by them, how much importance they give for feedback, to what extent they adopt planned approach for sharing information and how familiar they are with various methods of communication are important variables, which reflect in the communication systems in the organisation. These variables are explained in table 4.12.

4.3.4.1 . 90% of the respondents in Education spend most of their working time interacting with their students and colleagues. Majority of the respondents in industry spend most of their working time with their superiors and subordinates.

4.3.4.2 Majority (75%) of the respondents in education estimate the information received by them from their senior colleagues as 'accurate' and the information received by them from their colleagues as 'somewhat accurate'. 65% of the respondents in industry estimate information from 'other seniors' as accurate and that from immediate superiors as 'somewhat accurate'.

Behavioural aspects of Communication

	Dimension	Meaning and Relevance
1	Interaction among people in the organisation	Communication systems in organisation influence the inter-personal relations among the people in the organisation and vice-versa. In a study of behavioral aspects of communication, interaction patterns assume significance.
2	Estimation of accuracy of information received	Irrespective of preciseness, clarity and relevance of information received by people in organisation, their own estimate of the information's accuracy is one of the major behavioral aspect.
3	Importance of feedback	A communication situation can be said to be complete only when the receiver of information send desired feedback to the sender. Absence of appropriate system for feedback is a majur lacuna in system.
4	Planning and organisation	Communication effectiveness largely depend on the sender's individual preparedness such as appropriate planning and organisation of information to be shared. This actually happens in the 'mind' of the individual.
5	Familiarity with various methods of Communication	Parties involved in communication process in organisation should be well acquainted with various methods of communication, failing which frequent communication system breakdown can happen, which in turn adversely affect the organisation.

Table 4.12

4.3.4.3 . 85% of education managers look forward for feedback in all communication situations, especially with the students. 75% of the industry managers also look forward for feedback in all communication situations in organisations.

4.3.4.4 . 85% of education managers always organise the information they have to share with / communicate to others. Rest of the respondents 'sometimes' organise the information. Among industry managers, 75% 'always' organise the information

they have to share with/communicate to others. 25% perceive the necessity to organise the information as depending on the people.

4.3.4.5 Almost all-educational managers and the industry managers under the study are 'fully comfortable' with various methods of communication such as verbal, written, addressing a meeting, etc. around 40% of the respondents, however, are not much familiar with non-verbal communication methods.

Having interpreted and discussed the data of the study on Communication in organisation, let us move to the interpretation of data on the process of Decision making in organisations

4.4 DECISION MAKING - PRACTICES

4.4.1. Decision making and extent of participation

As mentioned in the previous chapter, the tools of data collection of the study has been modified based on the analysis of findings of pilot study. One of the findings of the pilot study was that the participative techniques in decision making are widely applied in the organisations brought under the purview of this study. Some of the important variables to study the extent of participation identified are self initiative of the people in the organisation, areas ·for participative decision making, policy and system support and participation in the implementation of the decisions. Table 4.13 contains explanation of the meaning and relevance of these dimensions. These dimensions however, are not comprehensive for understanding the extent of people's participation in decision making process in organisations.

Decision-making and extent of participation

	Dimension	Meaning and Relevance
1	Self-initiative	The formal atmosphere of organisations and its other characteristics, prevent people from taking initiative for contributing to decision-making process. Self-initiative dimension in participation in decision-making in organisations obviously have positive and negative impacts
2	Areas for participative decision-making	In many organisations, the participative decision-making techniques are confined to certain functional areas only. In the process of decision-making, the areas/avenues are very important.
3	Policy support for participative decision-making	In the present fast changing techno-commercial environment, policy support for decision-making process is needed for a particular system to apply consistently for safeguarding organisational intersts
4	Participation in implementation of decisions	Effective participation in decision making process actually happens only when the people involved in the process commit themselves for implementation of the decisions,

Table 4.13

4.4.1.1 . 75% of the educational managers perceive that they have considerable say in the admission procedures, scheduling of examinations and curriculum content, selecting teaching materials, etc. 'Joint decision making' practice involving all faculty members is widely applied.

As far as industry managers are concerned, 65% of the respondents perceive that they have 'complete control' over arranging the layout of the work place, plan the work, shift scheduling, etc. 35% feel that they have only an advisory role in these aspects and the actual decisions come from their superiors.

4.4.1.1 Majority of the educational managers feel that they have 'complete control' over the research projects they or their students undertake. Majority of industry

managers feel that 'joint decision-making' practice is widely prevalent in subjects such as purchasing of equipment, transferring someone to another job, safety procedures, etc.

4.4.1.2 . 65% of the educational managers perceive that in the matters such as recruitment of new faculty, preparation of budget, resource mobilisation, etc., they have the 'opportunity to give advice' and at times, their advice is taken into consideration.

Majority of industry managers perceive that they have a kind advisory roles in matters such as nominating employees for training course, improving working conditions, designing cost saving proposals, etc.,

4.4.2 Decision-making and degree of satisfaction :

In its fundamental analysis, the organisational happenings are nothing but the projection of the collective minds of people in the organisation. The satisfaction that is derived from the participation in the decision making apparatus of the organisation vary from individual to individual in the same organisation. From a broader context, how organisations view and value the opinions of people, how genuine the consultation processes are, what is the system to ensure that the responsibility and accountability are properly defined and whether the policies and outlook of the organisation tolerate mistakes of the people are some of the dimensions explained in table 4.14, regarding the decision making and degree of satisfaction.

Decision-making and degree of satisfaction

	Dimension	Meaning and Relevance
1	Reception and value of opinions and ideas	Satisfaction in organisational or work life is purely individual matter. The organisational environment however, can facilitate the degree of satisfaction among people by involveing their ideas/opinions in the policies and systems of the organisation.
2	Genuineness of Consultation	The actual participation should encourage employees intellectually and emotionally. Psuedo participation will have adverse consequences on organisation growth and employee satisfaction
3	Responsibility and accountability	Making people responsible for various organisational tasks with appropriate accountability provides them a good degree of satisfaction. Responsibility and accountability should go in tandem during the implementation of various decisions
4	System for reviewing the decisions	To what extent the systems in the organisation tolerate mistakes of people in the even the decisions go wrong, is important for development of organisation.

Table 4.14

4.4.2.1 Majority of the educational managers perceive that their colleagues and senior

faculty members ask their opinion on improvement issues related to their subject

of those affecting the institution as a whole. Majority of the industry managers

also perceive that they are being given due importance for their creative

suggestions related to their own work or pertaining to the development of the

organisation.

4.4.2.2. 75% of the educational managers perceive that they get opportunity to take

responsibility for their work and the interference from different quarters of the

institution is very less. Majority of the industry managers perceive that though

their superiors give attention to their ideas and suggestions, they are all restricted

to certain operational areas only and decision-making which involves higher cost input, strategies, etc. are exclusively participated in by top management.

4.4.2.3 Majority of educational managers perceive that they are very much consulted by other faculty members or governing bodies before any change is made in work. Majority of industry managers perceive that most of the time, the change is made without proper consultation, however, these changes could be so relevant to the department and the organisation, for which enough time may not be available for consultation and discussion. A minority of respondents in education and industry perceive that many a time, the consultations and discussions are not genuine and certain pre-planned ideas are implemented through persuasion.

4.4.3 Decision-making and effects of participation :

The participative techniques revolve aroudn participative decision making pushed down to the lowest level of the organisation, and use work teams, self-managed groups etc. These techniques have been used extensively overseas for a number of years, but are also becoming popular in enlightened Indian organisations in Education and Industry sectors. The table 4.15 summarises the applications abroad and what Hewlett-Packard does with these techniques in the United States.

The dimensions considered in this study for interpreting and discussing the data related to effects of participation in decision making processes are dissemination of information,

Applications and Use of Modern Participative Techniques Across Culture

Type of Participative Technique	Japnese Firms	Spanish Co-ops	Swedish Auto Firms	Hewlett-Packard
Decision-making At the worker level	Widespread quality circles with the power to change the deployment of workers within workshops and the way jobs are concluded	Experiments with shop-floors re-designs,small work teams and quality cirlces along Japanese and Swedish lines are being diffused among the co-ops.	Workers design and organise their own jobs within a team framework to accomplish their common assignment. tHe design of the factory supports their self-paced team work	700 quality circles at peak. Implementing self-directed work teams. Cooperative product design. Quality programme.
Team of self-managed groups	Organisation structures, such as broad job specification, group responsibility and job rotation, require and promote teamwork	Experiments with small work teams and quality circles along Japanese and Swedish lines are being diffused among the co-ops.	Self-directed assembly groups with frequent job rotation and enrichment	Units are kept small communication emphasized. Participative decision-making practiced. Implementing self-directed work teams in new factories.

Table 4.15

Source: David I Levine, "Participation, Productivity, and the Firm's Environment," California Management Review, Summer 1990, p 88 (taken from Luthans Fred, *Organisational Behaviour* (1992) , McGraw-Hill, p.505)

individual job satisfaction, acceptance of decisions, time for participative processes, quality of decisions and independence and responsibility of people in the organisation. Table 4.16 contains a brief explanation of the meaning and relevance of these dimensions.

Decision-making and effects of participation

	Dimension	Meaning and Relevance
1	Dissemination of information	It is important for decision makers to disseminate various circumstances, facts, figures, etc. related to decision throughout the organisation. Participative techniques probably make this effort faster.
2	Individual job satisfaction	One of the major outcome of participative techniques of decision making in organisations is its impact on job satisfaction for people. People would feel that their jobs have appropriate place in the organisational systems.
3	Acceptance of decisions	Involvement of people and recognition of their contributions in organisational endeavours will naturally result in better acceptance of decisions throughout the organisation.
4	Time taken for participative process	When compare with certain other decision making techniques, participative processes are time-consuming which influence the quality and modalities of implementation of decisions.
5	Quality of decisions	Participative decision making processes involve utilisation of all the available expertise in the organisation, thereby ensure the quality of decisions.
6	Independence and responsibility	For better results in any endeavour, the freedom should work hand in hand with responsibility. One of the effects of the nature of decision making in organisations could be that the people tend to take more responsibility and feel at ease while implementing the decisions.

Table 4.16

4.4.3.1 . 85% of the educational managers perceive that participation in decision-making process results in more job satisfaction and facilitate people's knowledge about the organisation functioning. Majority of the industry managers also feel so.

4.4.3.2 Majority of the educational manager's feel that participative decisions may be accepted by majority of people easily but the quality/merit of the decisions also carry much weightage. 65% of the industry managers perceive that decisions

taken through participative methods can be easily accepted by people across the organisation.

4.4.3.3 . 75% of educational managers and industry managers do not feel that the consultation/ participation process results in better care of the interests of employees in the organisation. But, they feel that this definitely facilitates interests of the employees.

4.4.4 Team Learning

Almost all respondents in this study realise the importance of individual and collective learning for development of organisation. It is worth mentioning the views of British Petroleum's John Browne.

John Browne believes that all companies battling it out in the global information age face a common challenge: using knowledge more effectively than their competitors do. And he is not talking only about the knowledge that resides in one's own company. "Any organisation that thinks it does everything the best and that it need not learn from others is incredibly arrogant and foolish", he says.

British Petroleum's chief executive, who engineered the revival of BP Exploration and Production and poised BP for spectacular growth, never accepts that something can't be done and is always asking if there is a better way and if someone might have a better idea. Under his leadership, BP is doing the same. And no matter where knowledge comes from, Browne says, the key to knowledge by replicating it throughout the organisation so that each unit is not learning in isolation.

To create an environment conducive to such learning, BP's leaders have taken a number of steps. They have built an extremely flat, decentralised organisation: there is nobody between the general managers of the business units and the company's top management. They have installed process to institutionalize breakthrough thinking and tie people's jobs to creating value. Finally, they have exploited advances in information technology and designed learning networks in order to encourage people to share knowledge.

4.4.5. Longevity of Organisation

From the discussions with the respondents on the contribution of Communication and Decision-making practices for longevity of organisations, some of the following aspects emerged :

* Creative use of resources, commitment;

* Sensitive to the changes in the environment;

* Clarity in organisational goals;

* Missionary spirit among the leaders, etc.

In this context, it is interesting to note some of the characteristics of Living Organisations based on the team findings of Royal Dutch/Shell Group.

What can explain the longevity gap between a company that survives for centuries - the Swedish Company Stora, for example, which is more than 700 years old and the average corporation, which does not last 20 years?

A team at Royal Dutch/Shell Group explored that question. Arie de Geus, a retired Shell executive, wrote in Harvard Business Review about the team's findings and described what he called living companies - organisations that have beaten the high mortality rate of the average corporation.

Many companies die young, de Geus argued, because their policies and practices are based too heavily on the thinking and language of economics. Their managers focus on producing goods and services and forget that the organisation is a community of human beings that is in business - any business - to stay alive.

In contrast, managers of living companies consider themselves to be stewards of a long-standing enterprise. Their priorities reflect their commitment to the organisation's long term survival in an unpredictable world. Like careful gardeners, they encourage growth and renewal without endangering the plant they are tending. They value profits the same way most people value oxygen: as necessary for life but no the purpose of it. They scuttle assets when necessary to make a dramatic change in the business portfolio. And they constantly search for new ideas.

These managers also focus on developing people. They create opportunities for employees to learn from one another. Such organisations are suited for survival in a world in which success depends on the ability to learn, to adapt, and to evolve.

In the world of institutions, commercial corporations are newcomers. They have been around for only 500 years - a mere blip in the course of human civilisation. In that time,

as producers of material wealth, they have enjoyed immense success. They have sustained the world's exploding population with the goods and services that make civilised life possible.

If one looks at them in light of what they could be, however, the most commercial corporations are underachievers. They exist at an early stage of evolution; they develop and exploit only a small fraction of their potential. Consider their high mortality rate. By 1983, one-third of the 1970 Fortune 500 companies have been acquired or broken into pieces, or had merged with other companies.

How do we know that many of the deaths are premature? Because we have evidence of much greater corporate longevity. Japan's Sumitomo has its origins in a copper-casting shop founded by Riemon Soga in 1590. And the Swedish company Stora, currently a major paper pulp, and chemical manufacturer, began as a copper mine in central Sweden more than 700 years ago. Examples such as these suggest that the natural life span of a corporation could be two or three centuries - or more.

The implications of the statistics are depressing. The gap between the endurance of a Sumitomo or a Stora and the fleeting life of the average corporation represents wasted potential. Individuals, communities, and economies are all affected - even devastated - by untimely corporate deaths. The high corporate mortality rate seems unnatural. No living species suffers from such a discrepancy between its maximum life expectancy and

the average span it realizes. And few other types of institution - churches, armies or universities - have the abysmal record of the corporation.

What is so special about long-lived companies? "All happy families resemble one another", Tolstoy writes in Anna Karenina. "But each unhappy family is unhappy in its own way."

Background

Before we discuss the characteristics of the living company in more detail, some background is in order. In 1983, a group at Shell set out to learn something about long-term corporate survival by studying companies older than Shell. Shell was about 100 years old at the time, so they looked for companies that already existed by the fourth quarter of the nineteenth century, that were important in their industries and that still had strong corporate identities.

What do the extraordinarily successful companies have in common? To find out, they look for correlations. They know that correlations are not always reliable; nevertheless, in the 27 survivors, their group saw four shared personality traits that could explain their longevity.

Conservatism in Financing. The companies did not risk their capital gratuitously. They understood the meaning of money in an old-fashioned way; they knew the usefulness of spare cash in the kitty.

Sensitivity to the World Around Them. Whether they had build their fortunes on

knowledge (such as DuPont's technological innovations) or on natural resources (such as

the Hudson's Bay Company's access to the furs of Canadian forests), the living

companies in the study were able to adapt themselves to changes in the world around

them. As wars, depressions, technologies and politics surged and ebbed, they always

seemed to excel at keeping their feelers out, staying attuned to whatever was going on.

Awareness of Their Identity. No matter how broadly diversified the organisations

were, their employees all felt like parts of a whole. Managers in the living organisations

they studied were chosen of a long-standing enterprise. Their top priority was keeping

the institution at least as healthy as it had been when they took over.

Tolerance of New Ideas. The long-lived organisations in the study tolerated activities in

the margin: experiments and eccentricities that stretched their understanding. They

recognised that new businesses may be entirely unrelated to existing businesses and that

the act of starting a business need not be centrally controlled.

By definition, a company that survives for more than a century exists in a world it cannot

hope to control. Multinational companies are similar to the long-surviving companies of

the study in that way. The world of a multinational is very large and stretches across

many cultures. That world is inherently less stable and more difficult to influence than a

confined national habitat. Multinationals, like enduring organisations, must be willing to

change in order to succeed.

These four traits form the essential character of organisations that have functioned successfully for hundreds of years. Given this basic personality, what priorities do the managers of living organisations set for themselves and their employees?

Priorities for Managers

The manager of a living organisation understands that keeping the organisation alive means handing it over to a successor in at least the same health that it was in when he or she took charge. To do that, a manager must let people grow within a community that is held together by clearly stated values. The manager, therefore, must place commitment to people before assets, respect for innovation before devotion to policy, the messiness of learning before orderly procedures and the perpetuation of the community before all other concerns.

Organisational Learning

How does an organisation - as distinct from an individual - learn? Birds can help us answer that question. Consider the work of Allan Wilson, the late professor of biochemistry and molecular biology at the University of California at Berkeley. According to Wilson's hypothesis, an entire species can improve its ability to exploit the opportunities in its environment. Three conditions are necessary. First, the members of the species must have and use the ability to move around, and they must flock or move in herds rather than sit individually in isolated territories. Second, some of the individuals must have the potential to invent new behaviors - new skills. Third, the species must have an established process for transmitting a skill from the individual to the entire

community, not genetically but through **direct communication**. The presence of those three conditions, according to Wilson, will accelerate learning in the species as a whole, increasing its ability to adapt quickly to fundamental changes in the environment.

To test his hypothesis, Wilson revisited a well-documented account of the behaviour of titmice and red robins in Great Britain. In the late nineteenth century, milkmen left open bottles of milk outside people's doors. A rich cream would rise to the tops of the bottles. Two garden birds common in Great Britain, titmice and red robins, began to eat the cream.

In the 1930s, after the birds had been enjoying the cream for about 50 years, the British put aluminum seals on the milk bottles. What happened? By the early 1950s, the entire estimated population of one million titmice in Great Britain, from Scotland to Land's End, had learned to pierce the seals. The robins never acquired that skill.

More and more organisations operate in a world they do not control. The chances that a organisation can influence today's world to its benefit grow smaller every day - as banks, insurance companies, telecommunication companies and software makers are finding out. Why? Because global competition is forcing companies to move out of their regional or national niches into less familiar territory. Even organisations that do not expand find the outside world invading their turf. In the global village, it is increasingly difficult to find niches or hide behind barriers. In short, corporate money machines risk becoming an endangered species capable of living only in protected national parks.

Living, learning organisations stand a better chance of surviving and evolving in a world they do not control. They make sense, especially because success now depends on mobilising as much of intelligence at the organisation's disposal as possible. The high levels of tolerance inside the living organisation create the space for more innovation and learning. Creating that space is vital for brain-rich, asset-poor organisations like law and accounting firms, credit card companies, and financial services companies, whose success depends on the quality of their internal communities., but even the old type of asset-rich organisation, such as oil and car companies, need much more knowledge embedded in their products and services now than they did 20 years ago.

Thus, the living organisations with its people's commitment and dedication with its adaptability to changes and learning abilities stand a better chance of longer life. Effective Communication and Decision-making practices, no doubt, facilitate this process.