CHAPTER I

INTRODUCTION

Industrial management involves guidance, leadership and control or efforts of a group of individuals toward some common goals of the industry. The organization structure of an Industry is mainly based on the nature and size of the business. If the number of departments is more, there is an additional expenditure for the maintenance of various departments. Creativity is the prerequisite to innovation. Industrialization played an important role in the economic development of India. A large difference in the per capita incomes of the developed and underdeveloped countries is mainly due to the disparity in the structure of their economies. The developed countries largely have industrial economies, while the underdeveloped countries are mainly confined to agricultural economies. India, being an underdeveloped until few decades country had no option but to industrialize for development.

So much has been said about change, today it seems almost pointless to repeat. Change is an inherent part of life brought by Mother Nature both in the environment and in human beings. The results of the sun, wind power, ocean currents, tidal waves, earthquakes, floods, droughts, etc., have impact on economy even though it appears to be industry and commerce driven and not agriculture based. The climatic changes due to deforestation, over population, pollution necessitate altered pattern of living and with it all the paraphernalia of Life. Socio economic environments change because the physical systems bring in the change in the creativity of the people to bring out the best in them, but these changes come about due to the nature of human beings. Human beings are curious by nature. To know, he/she questions, and manipulates the resources. People are the greatest assets of an organization,
since its through people all other resources are converted into utilities. However, management of ‘People Resources’ has always been a vexed problem, ever since the beginning of organized human activities.

A number of managerial responses have been developed to answer this question. Participation methods in the work place are some of the ways to improve both the work environment for employees and productivity with quality of the company.

Informal groups are one of the employee participation methods. It implies the development of skills, capabilities, confidence and creativity of the people through cumulative process of education, training, work experience and participation. It also implies the creation of facilitative conditions and environment at work, which creates and sustains their motivation and commitment towards work excellence. Informal groups have emerged as a mechanism to develop and utilize the tremendous potential of people for improvement in product quality and productivity.

Industrial economics is a distinctive branch of economics which deals with the economic problems of industries, and their relationship with society. In economic literature it is known by several names with marginal differences such as ‘Economics of Industries’, ‘Industry and trade’, ‘Industrial organization and policy’ ‘Commerce’ and ‘Business economics’, etc. The name ‘Industrial economics’ was adopted in the early fifties perhaps through the writings of P.W.S.Andrews. Although this name is becoming popular day by day some authors, particularly in the American circle, prefer ‘Industrial organization’ as a title of the subject. At present there is no clear-cut


consensus on the name of the subject. There are two broad elements of industrial economics. The first one, known as descriptive element, is concerned with the information content of the subject. It aims at providing the industrialist or businessmen with a survey of the industrial and commercial organization of his own country and of the other countries with which he might come in contact. It would give him full information regarding the natural resources, industrial climate in the country, situation of the infrastructure including lines of traffic, supplies of factors of production, trade and commercial policies of the governments and the degree of competition in the business in which one operates.

In short, it deals with the information about competitors, natural resources, factors of production and government rules and regulations related to the concerned industry. The second element of the subject is concerned with the business policy and decision making. This is the analytical part dealing with topics such as market analysis, pricing, choice of techniques, location of plant, investment planning, hiring and firing of labour, financial decisions, product diversification and so on. It is the vital part of the subject and much of the received theory of industrial economics is concerned with this. How do decision making problems arise in industries? To answer this question, we have to go back to the core of economics. According to L. Robins, “Economics is the science which studies human behavior as a relationship between ends and scarce means which have alternative uses”\(^3\). As implicit in this definition, an economic problem arises because of scarcity of means and their alternative uses in relation to the needs of any individual or a group or society as a whole.

For example, the income of a consumer is generally limited but wants are unlimited. In this situation one has to adopt some criterion to achieve

maximum gain from limited income. This is the problem of utility maximization in the theory of consumer behavior. Similarly, for a producer, the resources like land, raw materials, labour, capital etc., are scarce. In such a scarcity, one has to take decisions about production and distribution. There are several basic issues on which the producer will take decisions such as: What commodities should be produced? What should be the level of output? What type of technology should be adopted, and where it should be produced? What should be the size of a factory? What price would be charged? How much wages should be paid? How much should be spent on advertisement? Should borrowings made from banks or elsewhere? etc. All such decisions explain the producer’s behavior in the different market situations, which help to study industrial economics.

Recently, there has been considerable emphasis on managerial economics in business or industrial management. This branch of economics deals with the concepts and analysis of demand, cost, profit, competition and so on, that are appropriate for decision making. Such topics are also covered in industrial economics.

1.1 HUMAN RESOURCE DEVELOPMENT (HRD)

Human resource development has a critical role to play in the achievement of organizational goals and helping the organization to achieve and maintain excellence. HRD has the role of getting the right kind of people, creating a culture and nurtures and retains talent, and aiding in renewal of various productive human processes. HRD needs to be appropriately structured and competently handled. Thus HRD is fashion driven rather than organization driven. HRD is a system of developing in a continuous and planned way, the competencies of individual employees, dyadic groups, teams and the total organization to achieve the organizational objectives.
Component Systems of HRD

The component systems of HRD are as follows:

- Career system
- Work-planning system
- Development system
- Self-renewal system
- Culture subsystem

HRD is a system of developing in a continuous and planned way, the competencies of individual employees, dyadic groups, teams and the total organization to achieve the organizational objectives.

Human Resource Development Process

It is continuous and planned process. This process can be identified in the context of work and its performance. Every work has two dimensions:

- Substantiate dimension
- Procedural dimension

Human Resource Development undertakes to develop this process which is of the following types:

Existential Process

It operates at the individual level. This process tends how an individual perceives the world and its different components, how one relates himself/herself with the environment, how one interact with others and how one tries to achieve the goals in one’s life, various individual’s dimensions
such as personality, motives, skills and ability, attitude and values determined and how one will carry on the existential process.

Coping Process

It operates at the level of role of an individual. Every individual is required to perform different roles with or without organizational context. In performing such roles one experiences pressures and stresses, which increases with an increasing amount of role conflict and role ambiguity.

Empathic Process

This operates at the interactive level involving two or more individuals. This process involves how much empathy an individual has for others, how much empathy he expects from others and how he reaches out with others and establishes relationships with them.

Growth Process

It occurs at the system level. It involves the growth of a system for a period of time. When this process stops the system starts declining. In this growth process, every sub-system individuals and groups grows.

Collaborative Process

It takes place at the inter-group level. When various groups are formed in a social system there is interaction among various groups to seek collaboration and co-operation.

Building Process

It operates at the group level. It involves the group formation and its operation.
Need for Human Resource Development

To develop competencies

- System-wide changes
- To create smooth organizational climate

Form of Human Resource Development

- Performing the Human Resource Development functions by creating a new department
- Performing the Human Resource Development functions through the existing Human Resource / Personnel department.
- Performing Human Resource Development functions through a committee or task force.

Responsibility of Human Resource Development Department

- To understand Human Resource philosophy and beliefs of top management and if these are counter productive, influence the top management to change these suitably.
- To formulate Human Resource Development policies in consultation with top management.
- To inspire managers to learn and develop themselves and employees working under them on continuous basis.
- To design training and development modules and implement these in consultation with the line managers.
- To evaluate the effectiveness of various training and development programs
To interact continuously with outside experts in Human Resource Development and institutions offering Human Resource Development programs to make effective use of these facilities.

1.2 GENESIS OF INFORMAL GROUPS

After the Second World War Japanese economy was in the doldrums. Seeing this disastrous effect of war, Americans decided to help Japan in improving the quality standards of their products. General Douglas Mac Arthur who, at that time, was the commander of the occupational forces in Japan took up the task of imparting quality awareness among Japanese to help them improve their products and the reliability of manufacturing systems including Men, Machines, and Materials. Thus by 1975 they were topping the world in quality and productivity. This astonishing and unique achievement in modern history became an eye-opener to the world industrialists and politicians from all over the world started visiting Japan to know how they have achieved such a magical results in such a short span. The answer to this was painstaking and persevering efforts of the Japanese leaders and workers and the development and the growth of the philosophy of small working groups. This resulted in the informal groups concept being accepted all over the world as a very effective technique to improve the total quality of work life.

Definition

“Informal groups is a small group of 6 to 12 employees doing similar work who voluntarily meet together on a regular basis to identify improvements in their respective work areas using proven techniques for analyzing an organization. It is a way of capturing the creative and innovative power that lies with in the work force”.
Philosophy

Informal groups is a people-building philosophy, providing self motivation and happiness in improving environment without any compulsion or monetary benefits. It represents a philosophy of managing people specially those at the grass root level as well as providing a mechanism and methodology for translating this philosophy into practice and required structure to make it a way of life. It is bound to succeed where people are respected and are involved in decisions, concerning their work life, and in environments where people’s capabilities are looked upon as assets to solve work area problems.

The informal groups philosophy calls for a progressive attitude on the part of the management and their willingness to make adjustments, if necessary, in their style and culture. If workers are prepared to contribute their ideas, the management must be willing to create a congenial environment to encourage them to do so. The informal groups concept was started in Japan by Prof. Ishikawa, who is known as ‘The father of informal groups movement’.

The contribution of informal groups in making Japan an economic super power had led many countries to adopt this concept. In India informal groups forum was started in 1980 with headquarters at Hyderabad. Today the forum has 25 chapters all over the country. Informal groups foster the spirit of team work and cooperation and bring about a sea change in the attitudes of people. A united team with good communication across all levels invariably increases effectiveness and efficiency of any enterprises be it a family, a locality, a housing society or an organization. Informal groups unleash the creativity in people and bring out the best in them for ‘continuous improvement is the credo of the informal groups movement’.
1.3 TOTAL QUALITY MANAGEMENT (TQM)

One popular approach to improving quality is “Total Quality Management”. However, this term has various meanings. In general, TQM involves the organization’s long term commitment to the continuous improvement of quality throughout the organization, and active participation of all members at all levels to meet and exceed customer’s expectations. This top management driven philosophy is considered a way of organizational life. In a sense, TQM is simply effective management.

Although the specific programs may vary, they usually require a careful analysis of the customer’s needs, an assessment of the degree to which these needs are currently met, and a plan to fill the possible gap between the current and the desired situation. The success of this quality improvement approach often needs the cooperation of suppliers. Furthermore, to make the TQM program more effective, top managers must be involved. They must provide a vision, reinforce values emphasizing quality, set quality goals, and display the resources for quality program. It is obvious that TQM demands a free flow of information – vertically, horizontally, and diagonally.

Training and development are very important for developing skills and for learning how to use tools and techniques, such as statistical quality control. This continual effort for improving quality requires an environment that can be called a “learning organization”. Any quality improvement effort needs, not only the support but also the involvement of management, from the top to the bottom, as well as non-managerial employees. Persons need to empower, initiate and implement the necessary changes. In the modern interlocking organization, team work often becomes a prerequisite for an effective and efficient operation.
The quality improvement efforts need to be continuously monitored through organizing data collection, evaluation, feedback, and improvement programs. TQM is not a one time effort; instead, it is a continual, long term endeavor that needs to be recognized, reinforced, and rewarded. When done effectively, TQM should result in greater satisfaction, fewer defects and less waste, increased total productivity, reduced costs and improved profitability, and an environment in which quality has high priority.

A concern for quality should not be restricted to businesses. Principles for quality improvement also apply to government. The Mayor of Madison, Wisconsin, demonstrated how they can be implemented city government. The first test came in the motor equipment division. After the initial success, a formal quality program was started citywide. What is surprising is that resistance in the program came not from unions or from the city council but from middle level bureaucrats who saw their power being eroded by the reduction in departmental barriers and by greater teamwork.

1.4 TOTAL QUALITY CONTROL (TQC)

TQC is been one of the most influential methods used in managing business process over the last 30 years. It has been incorporated as a vital component in the management systems of some of the world’s most successful enterprises. TQC is a system for integrating the quality development efforts of the various groups in an organization so as to produce marketing, engineering production and service at the most economic levels for full customer satisfaction. It is also a process that recognizes the need to determine the customer requirements to drive the entire organization to ensure the needs are fully met.

TQC is essentially a way of planning, organizing and understanding each and every activity that takes place in the organization and depends on
every individual in the organization. All members of Total Quality Control strive to systematically manage the improvement of the organization through the ongoing participation of all employees in problem solving efforts across functional and hierarchical boundaries.

TQC incorporates the concept of product quality, process control, quality assurance and quality improvement. TQC provides the fundamental basis of positive quality motivation for all company employees and representatives from top management through assembly workers, office personal, and service people. It is the control of all transformation processes of an organization to satisfy customer needs in the most economical way. TQC allows the employees who do the work to measure and take corrective action in order to deliver a product or service that meet the needs of the customer.

The Evolution of TQC

Japanese Quality Control is a thought revolution in management. It represents a new way of thinking about management. Dr. K. Ishikawa, Japan’s foremost authority in this field defines quality control as, “To practice quality control is to develop, design, produce and service a quality product, which is most economical, most useful and always satisfactory to the customer”. Quality Control is an integral, yet often underrated concept key to successful day-to-day operation of any large or small manufacturing or factory based company. The narrow interpretation of quality control is producing quality product. The Japanese expand this definition in a broader sense to include:

Quality of service, quality of work, quality of information, quality of process, quality of division, quality of people including workers, engineers, managers and executives, quality of systems, quality of company and quality of objectives.
Essentials of effective functioning of TQC

All departments must participate with the head of each department taking the lead. Each department must take initiative in liaising with related departments. Every employee must be involved in this activity. That is all members of the company from the Chairman to the chief executive, senior officers, directors, departments, section managers, technical and administrative staff down to informal group member must participate in implementing quality control. Quality control must be implemented comprehensively. To produce products that consumers and society will buy happily, the quality must come first but at the same time costs, delivery and safety must be comprehensively controlled.

Ten Benchmarks of TQC

- Quality is a company wide process
- Quality is what the customer says it is
- Quality and cost are a sum and not a difference.
- Quality requires both individual and team work zealotry.
- Quality is a way of managing.
- Quality and innovation are mutually dependent.
- Quality is an ethic.
- Quality requires continuous improvement
- Quality is the most cost effective, least capital intensive route to productivity.
- Quality is implemented with a total system connected with customers and suppliers.
Implementation of TQC

Dr. Ishikawa attempted to standardize the procedure of implementing quality control by setting guidelines for implementation:

Engage in quality control with the goal of manufacturing products with the quality, which can satisfy the requirements of consumers. Just meeting the standards or specifications of national organizations is not the answer. These standards and specifications are not perfect and do not always satisfy customer requirements. Customers change their requirements often as the market and consumers dictate. Companies most emphasize customer orientation. Companies aim to develop the best products and think that they are doing everyone a favour by providing quality products. This approach should be changed to take in to account customer requirements and preferences during the design, production and sale of products. Interpret quality in the broad sense to take into account all department of the company versus concentrating solely on the production department.

Goals of TQC

Companies all have different goals for TQC and reasons for implementing it; however they all have similar purposes summarized by Dr. Ishikawa:

- Improve the corporate health and character of the company.
- Combine the efforts of every employee, achieving participation by all and establishing a co-operative system.
- Prevent poor quality rather than correcting problems after fact.
➢ Attitude of continuous improvement in operations.

➢ Understand the value of measuring performance in identifying opportunities and maintaining improvements.

➢ Identify and eliminate chronic sources of inefficiencies and costs.

➢ Establish a management system that can source profits in times of slow growth and can meet various challenges.

➢ Utilize quality control techniques.

**Principles of TQC**

One way of understanding TQC is through its principles.

➢ Customer Satisfaction

➢ Continuous Improvement

➢ Extensive Measurement

➢ Process Approach

➢ System Approach

➢ Employee Involvement

**The Philosophy of TQC**

The philosophy of TQC is to make “continuous process improvements to increase customer satisfaction”. This focus is on the customer and not on the company itself. The customer can be internal customer at the next process step, or an external customer who purchases or uses the product or service.
The Need of TQC

The purpose of TQC is to help in order to reduce two of the biggest drivers of cost in the process-variation and complexity. More complex the processes are, the more are the chances of performing them incorrectly. Variation in the processes can cause deviation from the target. The farther one is away from the target the more are the losses.

1.5 CUSTOMER SATISFACTION

The ultimate goal of TQC is to please customers and meet or exceed customer requirements. Customer satisfaction is the result of the number of positive and negative factors that are experienced by the customer. The more satisfier factors represent higher customer satisfaction. Eliminating dissatisfiers alone will not result in increased satisfaction level. It will only result in few dissatisfied customers. For continuous survival, the attention and commitment of very few dissatisfied customers and more satisfied customers is necessary for achieving business success.

1.6 CONTINUOUS IMPROVEMENT

Continuous improvement is a continuous activity aiming for higher process effectiveness and efficiency. These activities often require new values and behaviour focusing on measuring customer satisfaction acting on results. In the global business arena markets are shifting with dramatic speed and are highly specialized. Responding to the global markets require constant change, innovation and also prevention addressing potential problems before they occur.

1.7 EMPLOYEE INVOLVEMENT AND TQC

Employees in total quality culture will continually improve their systems working with managers and quality experts in order to excel at
meeting the needs of the customer both inside and outside the organization. Employee involvement serves as a support mechanism for employee strategies of TQC. The involvement of employees is generally considered to be a vital aspect of TQC. Today customer requires total care. This can be made possible only when every person in each department is involved in eliminating errors and preventing waste with the objective of creating a quality culture for doing things “right first time and every time”. TQC does emphasis on customer satisfaction, it equally recognizes individual employee of an organization. Implementation of TQC leads to creation of an organization culture and culture and climate where employees are freely allowed to innovate and use their capabilities. Employee involvement initiatives began as support mechanisms for managerial strategies such as TQC, business process re-engineering, high performance work systems and learning.

TQC includes activities such as direct employee exposure to customers, work simplification and process improvement teams. TQC and employee involvement both aim at improving the bottom line of the organization where TQC tends to work simplification while employee involvement focuses more on the motivational system of an organization and how work should be designed TQC increased its popularity in many organizations in recent years and is bound up with cultural changes. In recent years there has been an enormous growth in the popularity of various employee involvement practices. Employee involvement is an important and essential way of optimizing human resource strategies. Employee involvement refers to creating an environment in which people have an impact on decisions and actions that affect their job. It helps to take the best out of the employees. It is a management philosophy about how people are most enabled to contribute to continuous improvement and ongoing success of their work organization.
Employee Involvement functions in TQC concepts

The following are the functions in which employee involvement can be maximized in TQC concepts:

- Cross functional team
- Supervisors improvement team
- Suggestion system
- Task force
- Informal groups

Cross Functional Teams

Cross-functional team refers to group of individuals from various functional departments, whose competencies are essential in achieving optimal solutions. Cross-functional teams are made up of individuals who represent different departments or functional areas in an organization. Members may represent different levels of the organization and different functional areas, but while they are participating on the cross-functional team they share responsibility and authority for the way the team works together and the accomplishments of the team.

Supervisor’s improvement teams

Supervisor’s improvements are made up of supervisors who represent different departments. Supervisor’s improvement team involves a group of supervisors brought together from different functional area to redesign a process or product or to make decisions about a process or product.
**Suggestion systems**

A suggestion system is a formal, organized approach for generating, evaluating and implementing good ideas of employees. A suggestion system provides a way of employees to submit ideas, prescribes how they will be recorded, evaluated, implemented and how employees will be rewarded for implementation of their ideas. It can also be defined as a way of tapping worker’s knowledge or ideas by inviting suggestions or improvements in work practices, organization etc, usually in return for a monetary reward. It is controlled by management and contains built-in-legal safeguards for both the employer and employee.

**Task force**

Task force is a team activity, which are carried out in small groups and often lumped together as small group activities. Team members may be from different departments selected by the management to accomplish a specific task and abolish as soon as the task is over.

1.8 **ORGANISATIONAL STRUCTURE OF INFORMAL GROUPS**

One of the factors for the success of any organization is its structure and the functional rapport between the different elements. For the successful operation of informal groups, a well structured approach is therefore, absolutely necessary. The model of the structure is indigenous. It is found that it is successful in our country.

The organizational structure of informal groups consists of several levels as shown below:

1. **Non-Members:** Non-Members play an important role in the informal groups activities. These are the persons who have to help in implementing the
recommendations made by the informal group members even the non-members would become part of the structure in the process of informal group activities. In fact, this would produce a catalytic effect on them and to arouse them either to become members of the existing circle or to form new circle.

(2) **Members:** The basic element of an informal group, of course, is the members themselves. Hence, the members are the heart of the program, and proper use of their untapped brain power is the key to its success. The concept of informal groups is introduced to the members by the management with the help of audio-visual equipment and meetings. Those who are interested in the concept will form an informal group. The members in a circle should be from the same work place as the members from the same work place are familiar with the work and it will be useful for them in meetings. The activities of the members include attending meetings without fail, participating actively in the meetings and contributing ideas in the problem identification and problem solving discussions and developing useful solution to the problem.

(3) **Leader/Deputy Leader:** The informal group leader is elected by the circle members. He is responsible for the operation of his circle and is therefore responsible for the circle activities. Generally the line manager acts as the leader of the informal groups. The main functions of informal group leader are – (a) conducting meetings regularly, (b) generating enthusiasm for circle activities, (c) acting as link between members and facilitator, (d) keeping the meetings on right track and (e) training members in problem solving techniques. The leader must have skills in discussion, initiation and promotion of active participation. He should be trained in group dynamics, human behaviour and participative leadership styles.

(4) **Facilitator:** Facilitator is an important link between the informal group leader and the steering committee. The main duties of the facilitator are: (a) serving as a informal groups co-coordinator, (b) training
members/leaders and management, (c)initiating the setting up of Quality Circles by persuading the supervisors by teaching and training, (d) providing feedback to the steering committee about the proceedings and results of the informal groups, (e) helping the informal groups in preparing the presentations, visual aids etc., (f) acting as an evaluator and reviewer of informal group operations and programs.

The facilitator has to maintain sound inter-personal relations in order to function as a social leader. He should prove himself successful in acting as a coordinator, coach, teacher, and innovator. He is expected to be an excellent resource person for training the manager at the higher level.

(5) **Steering Committee:** It is an apex body at the highest level of plant/factory which would be responsible for formulating the objectives and for supplying the resources for the informal group activities. It advises guides and directs the informal groups in their operation. The structure of the committee is made up of the departmental heads from every major function like production, finance, material management, engineering and other service areas headed by the Chief Executive of the plant/factory.

The main functions of the steering committee are;

I. Providing training to informal group leaders

II. Arrangement of meeting halls

III. Providing budget for informal group activities

IV. Making informal groups activities as part of the organizational goals.

The steering committee would take part in the top management presentation given by the informal groups and to respond to circles recommendations expeditiously. They may also participate in annual social get-together.
(6) **Top Management:** The top management in the quality structure consists of Chairman and Managing Director, Directors, Chief Executives, General Managers and other top executives. Without the faith and commitment, support and encouragement from this top level, the activities of the informal groups cannot be deemed to have been complete.

(7) **Coordinating agency:** Although the informal groups structure does not envisage a separate department to look after its activities, a great deal of coordination is called for convening steering committee meetings, arranging management presentations, formulating budgets and disseminating relevant information on circles to the parties concerned etc. The main functions of the coordinating committee are:

i. Preparing agenda and convening meetings of the steering committee.

ii. Presenting the report of the informal groups activities to the steering committee.

iii. Maintaining the statistics of the operation of the informal groups and

iv. Coordinating training programs and arranging seminars, workshops, conventions and top management presentations once in two months

**The benefits gained through informal group activities are:**

- Increase in quality consciousness of employees
- Development of an attitude of problem prevention
- Promotion of employee motivation
- Improvement in the human relations
- More effective communication
- More active job involvement
- Utilization of employee problem solving capabilities
- Contribution to personal development of employees
- Encouragement of team work
- Improvement of work environment
- Development of safety awareness
- Control and improvement of quality
- Production improvement
- Increase in job security

1.9 RESEARCH PROBLEM

Peter Drucker answers the question “What is Management and What does it do?” by saying that, “It is a multi-purpose organ that manages a business and managers and manages worker and work.” The words administration, management and organization are not synonyms. Administration is the function in industry concerned with the execution of policy, the coordination of finance, production and distribution, the settlement of compass of the organization and the ultimate control of the informal groups member.

Management proper is the function in industry concerned in the execution of policy within the limits set up by the administration and the employments of the organization for the particular objects set before it. Organization is the process of so combining the work which individuals or groups have to perform with the facilities necessary for its execution that the
duties, so performed, provide the best channels for the efficient, systematic, positive and coordinate application of the available efforts.

**The HRM function should aim at:**

- Improve the performance of the managers
- Encouragement
- Participation
- Ensure sufficient people with requisite skills
- Decide as to how to retain the talented people etc.

Today HRM has become the need of the hour. The technologies we import are most often outdated and inefficient as compared to those currently in use in developed countries. HR plays a vital role on production and development of any enterprise without which no development is possible. Thus proper organization and administration of the HR is very important.

HRM is concerned with ‘people’ dimension in management. As management began to mature, more emphasis is being placed on the workers. They found that one of the ways to influence their productivity is to recognize workers for their work they have done.

This research deals with informal groups participation which is one of the unique and challenging talents for any employee. The previous studies deals with topics like leadership, motivation, communication, decision making etc but not with informal groups participation as a separate research topic. The aim of the present study is to analyze about the informal groups participation in Ashok Leyland. There are various research work done at Ashok Leyland but not in this area. This research will be a base for the future researchers in the area of informal groups movement.
1.10 TECHNIQUES FOR PROBLEM SOLVING IN INFORMAL GROUPS

The following techniques are commonly used by members of informal groups during their meetings for problem solving sessions. The members should be adequately trained on the use of these techniques, when the circles activities are started.

1. Data or information collection
2. Brain storming
3. Cause and effect analysis
4. Pareto diagram
5. Control charts
6. Flow diagram and process flow chart.

1. Data collection

Before trying to study and analyse a problem, it is necessary to collect full information, including any technical, design or process data. The information required may be in the form of reports, tabular material, graphs, photographs, micro-structures, flow process charts, flow diagrams, control charts etc.

2. Brain Storming

It is a group of participative technique, which involves intimate discussions and generation of ideas from amongst the participants, bringing out imaginative and creative solutions. A group approach builds understanding, tolerance and unity of purpose. A pre-requisite for the use of brain storming is that the members should have an open mind without any
pre-conceived notions or bias. This technique helps in problem identification, investigation and analysis.

3. **Cause and effect analysis**

   It gives a systematic arrangement of all possible causes which give rise to certain effects. All possible causes of a given problem are listed, so that no cause remains ignored. The corresponding effects are shown and the situation is analyzed in detail.

4. **Pareto analysis /Diagram**

   This technique helps in identification of those few vital causes, which are important from a host of causes.

5. **Control charts**

   These charts not only show the defectives as they occur but also give a timely warning well before the defectives start occurring, so that necessary corrective action can be taken on time. Control charts are commonly used in materials control, process control and quality control of the finished product.

6. **Flow diagram**

   Flow diagram is a diagrammatical representation of the flow of materials as they are moved from one work place to another for processing or the flow of operations as they are performed in order to produce goods. It could also be for showing the flow or movement of equipment as it is moved from one station to another.
1.12 **OBJECTIVES OF THE STUDY**

- To find out the over-all effectiveness of informal groups participation among the employees in Ashok Leyland Limited.

- To find out the levels of workers participation in management and the motivational factors influenced on the members of the informal groups.

- To find out the members support in implementing of final informal groups solutions for the organization development.

- To find out the job satisfaction level and the evaluation methods of informal groups’ projects.

- To find out the tangible and intangible benefits to the members of informal groups and the performance level of employees in their working environment.

- To find out the factors that influenced the employees to become members of informal groups.

- To identify the techniques of informal groups which are useful in identifying the problem to be solved.

1.13 **SCOPE OF THE STUDY**

The main aim of conducting this research is to measure the informal groups impact on the development of the organization and also to seek improvement in it. The research study was conducted through personal observation and structured questionnaire method. The research concentrates on identifying the members feeling about informal groups. The respondents were selected from various departments. This study is helpful to know about the effectiveness of informal groups participation and their performance.
The study is also useful in analyzing the problems existing inside the organization. It helps to find where the problem actually occurs and it provides various suggestions to the company in order to improve them in the coming years. The study will be helpful for the company in many ways through the results obtained from informal group members. In the new industrial environment scenario industry has to improve its productivity ensure quality and be cost effective to the product.

1.14 LIMITATIONS OF THE STUDY

The study focuses on the perceptions of informal groups members about their HRM competencies in their organization. The study is focused on Ashok Leyland Limited only. Information collected through the questionnaire from the respondents is assumed to be reliable. This study considers the perception of informal group members at the micro level only and these perceptions are subject to change in the days to come. The results are based on 500 samples only. The data have been collected only from the segment taken for the study. The result may vary if other segments are also considered for the study.

1.15 RESEARCH METHODOLOGY

This study employs both analytical and descriptive type of methodology. The study is conducted in two stages format, with a preliminary pilot study followed by the main study.

Study Area

The survey is conducted among employees of Ashok Leyland Limited functioning in Ennore, Chennai. Chennai hosts a number of manufacturing companies who have regional offices in Chennai. The entry of these reputed companies has raised the economic standing of many young and
educated professionals. Chennai, being a metropolitan city, truly represents employees belonging to various strata of the organization. South India accounts for 35% of the total manufacturing sector, and Chennai region in particular accounts for 60% of the total manufacturing business in Tamil Nadu (The Hindu, Sept 11th 2003).

Selection of Respondents

The choice of respondents was decided during a brainstorming session by the researcher. It has been noted that certain respondents were from very meticulous and known to all informal groups, as they were more sensitive in their involvement and commitment (Webster 1994). The respondents chosen are a member of informal groups. In order to have knowledge about informal groups, the researcher conveniently attended the open meetings of the company during the specific time period of 6 months. Close observations were made during the stipulated time period to determine the number of meetings conducted by the informal groups and number of participants who have attended the meetings within the range of their position. The details are formulated in the following table:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of the Department</th>
<th>No. of Meetings Conducted</th>
<th>Average Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Human Resources</td>
<td>24</td>
<td>220</td>
</tr>
<tr>
<td>2.</td>
<td>Production</td>
<td>15</td>
<td>750</td>
</tr>
<tr>
<td>3.</td>
<td>Quality</td>
<td>08</td>
<td>255</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>47</td>
<td>1225</td>
</tr>
</tbody>
</table>

From the above table, it is found that more number of employees in HR department attended the organized informal groups meetings followed by production and quality. The researcher attended most of the meetings of the above departments. Out of 47 meetings, the researcher attended all the 24 HR department meetings, 10 Production department meetings and attended all the 8 meetings of Quality. Five Production department meetings were not attended by the researcher because of co-incidence of time of the meetings. Other departments were noted because, all come under the meetings of the prominent three departments.

**Questionnaire Design**

The pre-test enabled the selection of respondents attending the informal groups meetings and their responses were obtained through a well-framed questionnaire. The questionnaire was based on the initial research model and propositions. Primary data were collected through questionnaire survey. The respondents were asked to give their opinion relating to the five major informal groups elements.

The first part of the questionnaire comprises personal and organizational factors with optional questions. The second part contains statements about the profile of the organization. Some optional questions were included along with the rating questions and also yes / no questions. The third part consists of statements relating to the informal groups competencies with Likert’s 5 point scale. The fourth part of the questionnaire relates to the effectiveness of informal groups. All relevant statements were included to derive responses. The fifth part comprises statements pertaining to the constraints faced by the respondents and the reasons for the high expectations from informal groups.
The researcher circulated the framed questionnaire among the employees in the informal groups meetings of different departments. Respondents were selected on the basis of willingness and availability. The filled up questionnaire was collected in the subsequent meeting. Some of the employees preferred the questionnaire to be read out by the enumerator and they indicated their answers. The respondents were informed that the study was being carried out as a part of the research work, in order to know their views about informal groups and their effectiveness.

**Pilot Study**

A pilot study was conducted to validate the questionnaire and to confirm the feasibility of the study. The personal interaction with employees in Ashok Leyland Limited gave the output for many informal groups factors namely, achievement motivation, performance appraisal, motivation, leadership, communication, teamwork, organizational commitment, customer orientation, work satisfaction and empowerment.

Out of these factors, five predominant factors were extracted through ranking process of mean values. The numerical values of the total scores of each factor were arranged in the descending order and five indispensable factors were established. The filled up questionnaires were collected from 60 respondents and Cronbach’s alpha criterion was applied to test the reliability. The value determined is 0.897 proving the reliability of the instrument. This also explains that the statements in the questionnaire were understood by the employees at 89.7% level. The quality of the questionnaire was ascertained and the test showed high reliability. The variables considered for the analysis were satisfying the normal probability distribution. Based on the pilot study, the questionnaire was modified suitably to elicit response from the sample group.
Non-Response Bias Checks

The non-response bias was check by both on a field and data (Churchill Jr. 1983) were carried out. As in any survey method, there will be non-response. The initial non-response, from the survey carried out by the researcher was deemed as acceptable as the calculated final response rate was high (94%). The main reasons given for non-response was refusal to answer the survey and the lack of time for enumerators to obtain responses. It is worth noting that, there is no statistical basis for accepting a response rate. What is important is that the sample is appropriate to the study. This is assessed by the similarity of the respondent’s demographics to the organizational statistics regarding the employees of Ashok Leyland (Year book 2007) which indicates that the sample was skewed towards the employees in the (30 – 40) age group.

During pilot survey, a total of 11 questionnaires were found to contain item omissions. This was initially coded in as ‘0’ in the first coding in SPSS. There are three methods to deal with item omission. The first is to treat the missing data as a separate category, the second is to conduct a multiple regression to determine the missing values, and the third is to calculate a figure based on the average for that item (Churchill Jr. 1987). The third option was chosen and carried out on all the missing items.

Reliability Evaluation

Reliability refers to the similarity of results provided by independent but comparable measures of the same object, trait, or construct (Churchill Jr. 1987). A similar definition, noting the amount of agreement between independent attempts to measure the same theoretical concept, was proposed

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by Bagozzi (1994). In essence, it is a method that describes the degree to which observations or measures are consistent or stable (Rosenthal and Rosnow 1991) or accurate and precise (Thorndike, Cunningham, and Hagan 1991). Reliability was assessed based on Cronbach Alpha as presented in Table below:

### TABLE 1.2
**CRONBACH ALPHA TABLE TO TEST RELIABILITY OF DATA**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Items</th>
<th>Range</th>
<th>Factors</th>
<th>Variance</th>
<th>Mean</th>
<th>SD</th>
<th>Alph.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informal groups perception</td>
<td>14</td>
<td>1–5</td>
<td>2</td>
<td>69.98</td>
<td>3.8</td>
<td>0.9</td>
<td>0.82</td>
</tr>
<tr>
<td>Workers participation</td>
<td>10</td>
<td>1–5</td>
<td>3</td>
<td>61.75</td>
<td>4.1</td>
<td>1.01</td>
<td>0.84</td>
</tr>
<tr>
<td>Workers performance</td>
<td>15</td>
<td>1–5</td>
<td>2</td>
<td>71.72</td>
<td>3.9</td>
<td>0.8</td>
<td>0.79</td>
</tr>
<tr>
<td>Motivation</td>
<td>10</td>
<td>1–5</td>
<td>2</td>
<td>69.91</td>
<td>3.9</td>
<td>1.1</td>
<td>0.91</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>20</td>
<td>1–5</td>
<td>3</td>
<td>72.71</td>
<td>4.2</td>
<td>0.6</td>
<td>0.87</td>
</tr>
</tbody>
</table>

Source: Computed data

The cronbach alpha reflects both the number of items and their average correlations. Thus, when a cronbach alpha value is small, the test is either too short or the items have very little in common and vice versa (Nunnaly and Bernstein 1994). This method has been recommended by

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(Churchill Jr. 1979, 1987) and (Nunnally and Bernstein 1994), and used in numerous other studies (Crook and Booth 1997).\textsuperscript{10}

Other factors that could not be assessed using alpha were determined. Through correlations it was determined that the higher the cronbach alpha value, the greater is the internal consistency, and therefore the greater is the reliability of the measure (Bagozzi 1994).

\textbf{Validity Evaluation}

Validity is synonymous with the accuracy of the measuring instrument. It is defined as the degree to which what is observed or measured, is the same as what was purported to be measured (Rosenthal and Rosnow 1991). External validity relates to the degree of generalizing ability, and internal validity which relates to the degree of validity of statements made about whether X causes Y (Rosenthal and Rosnow 1991).

This method used in this thesis has its own inherent external validity issues related to the effectiveness of informal groups of employees of Ashok Leyland Limited and popularity of the company. Its external validity is limited as it is unlikely that respondents will recommend (by word-of-mouth) or deeply dedicate to informal groups of the company that they have involved before. The highly practiced aspects are more likely to be recommended. However, respondents differ in their perceptions of effectiveness of informal groups mainly relating to the HRD practices and the development rate of employees, which is the main issue being investigated.

Determining validity is considered the most important consideration in questionnaire evaluation and involves content-related validity, criterion-

related validity and construct-related validity (American Psychological Association 1985). Construct-related validity refers to the question of what the instrument is, in fact, measuring (Churchill Jr. 1983). It addresses the psychological qualities contributing to the relation between X and Y (Rosenthal and Rosnow 1991). There is no direct measure of construct-validity, but it can be discovered via the emergence of meaningful factors through factor analysis. In the case of the scales used in this thesis, construct-validity is shown through exploratory or confirmatory factor analysis and the fact is that the scales have been validated in previous research contexts.

Content-related validity focuses on the adequacy of the domain of the characteristics captured by the measure and is also known as face validity (Churchill Jr. 1983). It refers to whether the test adequately samples the relevant material it purports to cover (Rosenthal and Rosnow 1991). One of the best ways to determine face validity is by the researcher defining what the variable is and what is not and then to take a large sample to be measured and refined.

Criterion-related validity refers to the degree to which the test correlates with one or more outcome criteria (Rosenthal and Rosnow 1991). Criterion-related validity is characterised by prediction of an outside criterion and checking the instrument against some outcome. In the case of this thesis, this can be seen by the expected changes in respondents’ reactions depending on the effective informal groups they involve.

**Scale Development**

This thesis employs two different scales in its measurement of the perception of respondents about the informal groups, effectiveness and individual efficiency. Each scale has its own range and options. The variety and number of scales are Likert’s five point scale and bipolar scale (e.g. Yes / No type).
The questionnaire used, comprises both optional type and statements in Likert’s five points scale. The responses of these sections are obtained from the employees of Ashok Leyland Limited in the five point scale, which ranges as follows: 5 – Strongly Agree. 4 – Agree. 3 – Neutral. 2 – Disagree. 1- Strongly Disagree.

This allowed for the standardization of results as well as making it easier for respondents to complete the questionnaire. The researcher and supervisor discussed the Likert’s five point scale and decided to assign the numerical value 3 for undecided or neutral. By referring to several approaches in statistics, it was decided to assign 3 to neutral. Undecided had a connotation that, the statements in the questionnaire do not have proximity to the respondents. But neutral implies that they are well acquainted with the statements in the questionnaire but they want to remain equidistant from the two extremities of agreement and disagreement. This would not affect the high Cronbach value.¹¹

**Data Collection.**

The sample size was determined by considering the number of employees attending the informal groups meetings. The author attended 47 meetings of the network marketing companies which was attended by 1225 employees belonging to different informal groups. The repetitive responses of employees are avoided. It was decided to collect responses from more than 10 percent of total number of employees who attended the meetings. A total of 600 questionnaires were circulated to the employees. The population from which the sample was sourced consists of employees in Ashok Leyland Limited. Size of the population cannot be decided because of the attrition at preliminary stages. Convenience sampling was utilized with individual

¹¹ Levin and Rubin, Statistics for management, 2001
subjects representing individual sampling units. This method has been suggested as satisfactory for theory testing purposes (Mittal 1995).

Out of 600 questionnaires circulated, only 515 questionnaires were returned by the employees. The author contacted the remaining 85 employees repeatedly but there was no encouraging response. After scrutinizing the 515 responses, it was found that 15 questionnaire were not completed properly. So, only 500 responses were considered for the research. Hence the exact sample size of the study is 500.

Secondary Data

The secondary data are collected from journals, magazines, publications, reports, books, dailies, periodicals, articles, research papers, websites, company publications, manuals, booklets etc.

Data Analysis

All data analysis was conducted using SPSS V-15. Sample means, standard deviation and N are presented in the analysis chapter for all the variables of the study. The data were screened in order to obtain the variance between various informal groups factor. Factor analysis, cluster analysis, one way analysis of variance, Karl Pearsons co-efficient of correlation, t-test, ranking analysis are discussed here.

Factor Analysis

Both Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) were used in this thesis. Factor analysis is a branch of multivariate analysis that is concerned with the sharp internal relationship of a set of variables. The numerous variables used in a multi-item scale such as those utilized in the thesis, can be analyzed to note if those variables could be
seen as approximately explaining a single factor (De Groot et. al 1982). EFA refers to the determination of the number of common factors necessary and sufficient to account for the inter correlations of a given set of variables (De Groot et. Al 1982). It is traditionally used to explore the possible underlying structure of a set of items without imposing any structure (Child 1990).

CFA, on the other hand, is where the number of factors is assumed to be known and the main issue is to fit a postulated pattern of zero and non-zero loading to a given correlation matrix (De Groot et. al 1982). CFA is more of a theory testing, rather than a theory rating method, as it is based on strong theoretical and empirical foundations (Hair Jr. et. at. 1998). Data obtained were investigated by an exploratory factor analysis to determine the number of latent constructs underlying the variables. This was then used in the CFA carried out by utilizing the first or second order CFA for the various scales used in the tests.

Cluster Analysis

This procedure attempts to identify relatively homogenous groups of cases based on selected characteristics using an algorithm that can handle large number of cases (Cox 1980). However, the algorithm requires to specify the number of clusters. It allows the researcher to analyse the existence of different perceptions of the respondents. The number of clusters

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may be derived by trial and error method or by computing the large scale differences among co-efficient obtained from hierachal clusters. This technique was considered appropriate, whenever the research is concerned with a comparison of mean scores, especially in the case of experimental study, involving manipulations such as in the case of this thesis (Bray and Maxwell 1988, Jowncend 2002). The basic assumptions of cluster analysis are, the variables should be quantitative at the interval or ratio level. The distances are computed using simple Euclidean distance among the appropriate variables. In the case of this thesis, clusters are formed with respect to the factors obtained though factor analysis.

**Analysis of Variance (ANOVA)**

ANOVA allows for the study of a single factor or several factors, but will only measure one variable (Bray and Monwall 1985, Towncend 2002). An ANOVA works by measuring the variance of the population in two different ways; the first is by noting the spread of values within the sample; the second is by the spread out of the sample means. If the samples are from identical populations, these methods will give identical results. The basic assumptions for ANOVA are random sampling independent measurements, normal distribution and equal variance (Jowncend, 2002).

**Karl Pearson’s Co-Efficient of Correlation**

The Karl Pearson’s Co-efficient of Correlation measures how variables or rank orders are related. This is useful in a linear relationship among variables. It also develops the linear parametric relationship among any of the factors.

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Non-Parametric Chi-square Analysis

Chi-square association test is a non parametric test useful to establish an association between two categorical variables. The frequency dumping in each cell of the cross tabs allows identification of the association between two types of heterogeneous groups and also the nature of cases in that particular cell. It also exhibits linear by linear relationship, and crammer’s phi-statistics to study the relationship.

*t- Test*

*t - Tests are used in situations where the research wants to compare two statistics. The basic utility of a t-test is that it produces a straight forward-easy to interpret results of significance. In the case of this thesis, two tailed t-tests were used after all other analysis were completed only to note the differences of assumed mean and computed mean directly. The basic assumptions for t-tests are random sampling, independent measurements, normal distribution and equal variance (Jowncend 2002). The t-tests were further strengthened by the use of the Bonferroni correction test which uses t-tests to perform pair-wise comparison between group means. It controls overall error rate by setting the error rate for each test, to the experiment-wise error rate divided by the total number of tests. Hence, the observed significance level is adjusted and the multiple comparisons are being made (SPSS In. 2001).
## 1.16 CHAPTERISATION

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter I:</td>
<td>Introduction deals with the concept of informal groups management and its effectiveness, statement of the problem, objectives of the study, methodology, scope and limitations of the study.</td>
</tr>
<tr>
<td>Chapter II:</td>
<td>Sketches the review of related literature relevant to the present study.</td>
</tr>
<tr>
<td>Chapter III:</td>
<td>Highlighted the Conceptual framework of Informal groups participation</td>
</tr>
<tr>
<td>Chapter IV:</td>
<td>Deals with the mechanism of Effectiveness of Informal groups and profile of the Ashok Leyland Ltd functioning in Chennai.</td>
</tr>
<tr>
<td>Chapter V:</td>
<td>Analysis of frequency distribution of demographic variables of employees and their organizational details.</td>
</tr>
<tr>
<td>Chapter VI:</td>
<td>Analysis of the Factors of Informal groups and Workers perceptions are done here.</td>
</tr>
<tr>
<td>Chapter VII:</td>
<td>Deals with summary of findings, suggestions, scope for further study and conclusion of the study.</td>
</tr>
</tbody>
</table>