Chapter-2

THEORETICAL REVIEW

2.1 Human Resource Planning – A Theoretical Review

Origin:
The concept is pretty old but useful in everyone’s life.

If you wish to plan for a year, sow seeds,

If you wish to plan for ten years, plant trees,

If you wish to plan for a life-time, develop man.

(Kuan Chung Tzu, d. 645 B.C)

Sometimes in the middle of 1960s, manpower planning, currently named as human resource planning, includes a holistic approach and shows a new horizon of management. An employee is finally recognised to be a resource which is more valuable than capital, machinery and facilities, and development of this resource becomes more and more popular subject and discussed in management literature across the globe. This new concept gathered momentums by the emergence of the corporate view of human resource planning in the mid 1970s, which continued through the 1980s, particularly as opined by Bell (1974), Bowey (1974), McBeath (1978) and Lynch (1982).

Smith (1980) advocated that manpower planning was rarely used before the mid-1960s, but actual practice was there as an unorganised are in some places for a long time but has not come to limelight. The concept was then translated to practice gradually over the years. Then human resource planning became a function of management since the emergence of modern industrial organization. The companies of early 1970s, who have planned for its sister concerned, growth and appropriate expansion, realized that if they have adequate supply of right kind of skilled people, then organization can easily achieve the success and its goal.
Chapter 2

Theoretical Review

This mindset led to materializing the human resource planning (HRP) as HR tool which will aid to meet the organisational strategy. The subject human resource planning is now the concern of those, managing the business and national economy as well. The reasons for considering HRP as an important tool are manifest. It is recognized that manpower is the valuable resource on which our economic future and growth depends. The rapid growth of industrialization and modernization has led organizations to rise into increasing complexities and functional imbalances. The technological changes are leading to a requirement of dynamic manpower in terms of skill and adaptability. The significance of human resource planning (HRP) relates to key managerial functions, efficient utilization of human resource, satisfying and motivating employees by maintaining better organisational culture and climate in order to achieve the higher productivity in the organization. Economist Alfred Marshal (1980) gave a pragmatic view that the head of the business must assure himself that the subordinates who are working within the organizations are the right employees and are doing their work perfectly.

Lawrence (1995) opined that, although it is difficult to visualize how some organizations could have survived without giving adequate attention to human resource planning, because these things cannot be bought ready made from the open market, particularly the higher level people? Particularly a long range plan is required for that. The modern navy is the best example of it. The organisation expected a relatively high proportion of highly skilled human resources with a great sense of discipline, highly specialized experience and a sense of dedication, all. It needs to be thought of in terms of quality and competency of human resources rather than statistical terms.

2.2 Human Resource Planning- Definition

Human resource, is the new nomenclature of manpower, with a little value addition, constitutes the most vital and important asset and a significant input of an organization; it is also well-known as decision taking resource of the company. According to French (2003), human resource is the major part to handle philosophy, policies, procedures and practices of company related to the management of employees within the organization. Manpower is the key economic resource which demands more attention from an enterprise as planning, its different issues like production, sales, materials, investment and profits etc.
Human resource planning (HRP) and manpower planning (MPP) are synonymous in its practice. Planning for human resource is a vital managerial function which ensures adequate supply of man power, proper quantity and quality and effective utilization as well. In organizations, there is a shortage of suitable manpower which can be dealt by proper HR planning. The organization determines its future manpower needs and then work out the sources from where its requirements will be filled up. An organization cannot forecast its future human resource requirements with any degree of accuracy unless these are related to future investments, production or services, business strategy, sales levels and government policies. According to Mohanty & Desmukh (1997), human resource planning is a strategic and semi structured and or unstructured exercise which requires attention and dedication from across the level of personnel; top, middle, low.

Struss and Sayles (1975) advocated human resource planning as “forecasting the prediction of the number of people to be hired, trained or promoted in a given period”. It is a process of thinking ahead, method of anticipating problems in long range, and searching through rational action based upon knowledge, to steer the action to achieve the desired goals. Joseph (1986) viewed that, manpower planning is the process by which a firm ensures that it has the right number and right kind of people in the right place at right time, doing things for which they are economically most useful. It is the method for determining future staffing pattern of requirements and developing an action plan to meet them. Birch et al (2007) opines human resource planning (HRP) in service industry as it aims to have the right number of people at right time in the right place with right skills to provide right services to the right people. He has mentioned that what would be the ideal work forces to do what, how, for whom and under which circumstances? For Example, much attention has been given to the challenges of an aging group of employees, because health risk differs by age and after childhood, It generally increases with the increase of age of employees which needs more attention and care than the younger group.

Human resource planning is, in essence, a process which ensures the correct numbers of human resources are available at the right time at the right place and the desired one (Caine, 1996). According to Amstrong (2006), human resource planning determines the actual human resources required by the organization to achieve its strategic goals and growth. Human resource planning is an integrative process, which is integrated.
with company’s’ business plans and program budget cycles. It also integrates personnel management system and corporate planning in order to maintain the quality, competency and quantity of human resources required to congregate the organization demand (Gabora and Plunkett, 1986).

Vetter (1967) viewed that human resource planning is “a process by which a management determines how an organisation should make a move from its current manpower position to its desired manpower position. Through prior planning, a management strives to have the right number and the right kind of people at the right places, at the right time to operate things which result in both the organisation and the individual receiving the optimum long range benefits.

According to Arya (1989), human resource Panning has been observed as;

a) Searching for and recruiting the required highly skilled and specially qualified employees for the organisation;

b) Getting the best employee to the right work to improve the productivity and efficiency of the organisation;

c) Anticipating the change in requirements of employees due to any reason and preparing for it organizationally;

d) To identify the needs of the organization and employees as well and developing people to provide the opportunity for growth.

Dale S. Beach (1991) has defined HRP as “a process of determining and assuring the organisation to have an adequate number of qualified persons available at the proper time, performing jobs which can meet the needs of the enterprise and which will provide satisfaction for the individuals involved.” Garry (2005) viewed human resource planning (HRP) as “a strategy for the acquisition, utilization, improvement and retention of enterprise’s human resources”. The purpose of human resource planning is to provide the continuity of efficient manning for the total business and optimum use of manpower resources by the application of statistical techniques (McBeath, 1992).
According to Cole (2002), human resource planning may be defined as ‘a rational approach to the effective recruitment, retention and deployment of people within an organization, including, when necessary, arrangement for dismissing staff’.

According to Cascio (1992), human resource planning is viewed as “the effort to anticipate future business and environmental demands in an organization, and to provide the employees to fulfil that business satisfying those demands”.

According to Koubek (2007), “personnel planning serves to achieve the goals of the organization by developmental predictions, setting the targets and realizing arrangements leading to current and future goals of business with adequate manpower”.

In the observation of Leon C. Megginson (1981) human resource planning is “an integration approach to performing the planning aspects of the personnel function in order to have a sufficient supply of adequately developed and motivated people to perform the duties and tasks required to meet organisational objectives and satisfy the individual needs and goals of organisational members.”

As per the view of Department of Employment (1976), Government of U.K, human resource planning is “a strategy for the acquisition, utilization, improvement and prevention of an enterprise’s human resources”

In the opinion of Hughes (1976), “human resource planning which is gaining currency in recent years, may legitimately give rise to several questions. The question is what will be the meaning which embraces activities that diverse as mathematical work on stochastic model, the ergonomics of job design, the sociology of management development, and never the less, a difficult problems of an industrial personnel department. According to him, it is difficult to give up a practical definition of manpower planning which is broad enough to cover all these types of activities.

According to Mathis and Jackson (1988), human resource planning is the process of analysing and estimating the current need for availability of employees. It also emphasises the factors that considers and includes the current level of skills and expected vacancies in an organisation due to the impeding reasons like retirement, discharge, transfer, death, sick
leave or any other reasons. Human resource planning must be a part of the overall strategic planning process because of its focus on vital part of organizational needs and functions.

Human resource planning is concerned basically with budgeting for the best use of man power resources in the organisation, just as the management accountant budgets for the best use of financial resources (Cumingma, 1985). It aims at maintaining and improving the ability of the organization to operate corporate activities and to achieve its goal, through the development of strategies designed to enhance the contribution of manpower at all times in the foreseeable future.

Rao et al (1991) viewed that human resource planning is the process of determining man power requirement in terms of number, kind, place and time for doing the right kind of job, which results in long run maximum individual and organizational benefits. It involves projecting and forecasting present personnel functions into the future which would be affected by organizational tactics and business situation, both internal and external.

According to Lynch (1982) human resource planning is mainly concerned with skill. Skill is the basic unit upon which HR planning centres its attention and proceeds accordingly. HR planning is searching for the right kind of skill(s); of right qualities or level(s); in the right quantity or number(s); in right place(s); at right time(s); and carrying out the right function(s); and seeks to satisfy these requirements in line with the long range business and fulfilling the economic objectives and goals of the company.

According to Stainer (1972), the main aim of human resource planning is to maintain and improve the ability of the organization to achieve corporate objectives through the development of strategies designed to enhance the contribution of manpower at all times in the foreseeable future. It simply means to forecast human resource needs and determining the way in which an organization’s future demand for human resource can be met by various sources of supply.

Human resource planning is in essence, a process ensuring the correct number of human resources available at the right time at the right place of the organisation (Caine, 1996). Quinn Mills, (1983) viewed that “human resource planning is a decision making process that combines three important activities:

- Identifying and acquiring the right number of people with proper skill;
Motivating the employees to achieve high performance;

Creating interactive links between business objectives and human resource planning activities.

Pandey (1998), in Human Side of Tata Steel states that “manpower planning relates to establishing job specification, determining the number of people required, and finding supply sources to fill these requirements”.

Human resource planning is a process that identifies the present and future human resource needs for an organization to achieve its goals and reach at pinnacle. Human resource planning functions as a linking pin between human resource management and strategic planning of an organization. It is a process that links human resource needs to its strategic plan to ensure that human resource is sufficient, qualified and competent enough to achieve the organizations goals and objectives. Nkomo (1987) found out in his study that there are no significant differences between the performance of firms using formal human resource planning procedure and firms that do not. However, there was an indication of a positive change in performance after the initiation of human resource planning, relative to non-users of such systems. Human resource planning is fetching essential elements for maintaining a competitive advantage and reducing employee turnover.

From the above definitions and studies done by eminent management professionals, academicians and practitioners, human resource planning may be defined as follows:

Human resource planning is the process to estimate, accumulate, utilize, motivate, retain, and develop the most important asset of the organization i.e. human resources, which is an important part of corporate planning process. Human resource planning provides inputs to the organisation regarding higher level strategic planning process (Greer, 2001). The benefit of such planning proceeds to develop and forecast forces the managers to reassess the fundamental assumptions under which organization operates. According to Mello (2002), the first component of human resource management (HRM) strategy is human resource planning followed by the design of work system.

The major components of human resource planning are represented below:

a. Demand forecasting( which includes future human resource requirement of the organisation);
b. Supply forecasting (which includes wastage of man power due to retirement, voluntary retirement, resignation, termination, disability, death etc, overall turnover, inventory of skills, inventory of performance and potential, training reserves, age and length of service etc.);

c. Manpower budget (i.e. to bridge the gap between the demand and supply of man power);

d. Recruitment and placement procedure;

e. Motivation of employees;

f. Career planning of all level;

g. Succession planning;

h. Training and Development;

i. Performance appraisal and potential appraisal;

j. Performance review and Counselling;

k. Information feedback;

l. Monitoring/Control.

2.3 Objectives of Human Resource Planning

Gabora and Plunkett (1986) opined that the primary objective of human resource planning system is to have the right number and quality of people available in the right place at the right time in order to assure long range productivity and organizational stability.

The objectives of human resource planning are mainly as follows:

a. To ensure optimum utilization of human resources within the organization;

b. To forecast future demand of manpower;

c. To provide control measures and ensure that resources are available as per the requirement of the company;

d. Other specified reasons for involving human resource planning and forecasting exercise are illustrated below:

i. To link human resource planning with organizational planning;

ii. To determine employment levels;
iii. To determine optimum training levels;
iv. To control wages and salary cost;
v. To endow with different development programmes like MDP, EDP etc;
vi. To expect redundancies;
vii. To cost the human resource in new projects;
viii. To assist productivity bargaining;
ix. To access future expansion requirements;
x. To help organization to cope with the technological development and modernisation;
xi. To study the manpower cost and value to their services;
xii. To decide whether certain activities required to be subcontracted etc;
xiii. To ensure career planning for every employer of the organization and making succession programmes.

2.4 Need of Human Resource Planning (HRP)

HR planning is considered as one of the most important elements in a successful HRM programme in any organisation. Most of the organizations feel that they could get ample of right kind of human resources whenever they require. In present era, all the public organizations do not engage in formal human resource planning. A company may be able to run smooth if it is small, changes little and the skills it employs are relatively simple. The following reasons clearly indicate why public organizations should carry on systematic human resource planning:

- **Future Personnel Needs:** Planning is important for ensuring personnel needs for the future.

- **To cope with future change:** Human resource planning allows the organisation to cope with changes in competitive forces, market situation, technology, products, and government regulations. Such changes often generate changes in job content, skill demands, number and type of personnel required.

- **High Talent Personnel Requirement:** The mix of worker employed in most of the organizations has shifted toward the high talent occupations, managerial and
professional personnel. There is often a shortage of high talent people in many enterprises. The time required to recruit and develop such personnel is a long term procedure. Much effort has to be taken to long range career development, counselling, planned work assignments, and appropriate rewards as well. The organization becomes helpless if there is dearth of talent occurs in terms of dynamism, highly specialized, technical persons which are required to the organizations. The people performing functions are highly interdependent. Hence, planning is necessary to avoid shortage. In addition, technological changes often up-grade some jobs and degrades others.

➢ **Strategic Planning Essence:** Every organization is engaged in strategic planning in the cutting age. Top management calculates the situation, in which the organization functions, assesses the SWOT (strengths, weaknesses, threats and opportunities) analysis of the enterprise, sets objectives and determines programs for implementation. Human resource planning is an essential component of strategic planning in the modern era.

➢ **Foundation for Personnel Functions:** Human resource planning provides essential information for designing and implementing personnel functions, for instance, recruitment, selection, personnel movement (transfers, promotions, layoffs) and training and personnel development.

### 2.5 Process of Human Resource Planning

It is viewed by the management scientists that human resource planning is a systematic analysis of the human resources within the organization. It begins with requirement forecast and availability forecast (Akhigbe, 2013). HRP is a process through which the company anticipates the future business and the related hurdles in environmental forces. Idris & Eldridge (1998) views that the internal human resource inventory has to be analysed first, which will show the path of initial manpower availability. Therefore, forecast of HRP is a necessary factor. Human resources planning (HRP) measures/anticipates the HR requirement for future period of time. It attempts to provide adequate manpower stock to perform organizational activities smoothly. There is requirement of estimating the exact number and the kind of employees needed at future dates in order to realize the goals and achieve the targets. Human resource planning, which
is an uninterrupted process, starts with finding out of HR objectives, progress with analysis of manpower inventory and resources and closes at performance appraisal and results of HR planning. For conducting any process, the foremost essential task is to develop the organizational objectives to be achieved through conducting the said process. Mehta(2011) states that human resource planning process consists of business plan, resource strategy, organization planning, forecasting of demand and supply, attrition, estimation, study of working environment and operational efficiency. However, the major steps of human resource planning process are given below:

   a. Systematic analysis of human resources
   b. Demand forecasting
   c. Supply Forecasting
   d. Reconciliation within the constraints of the company’s circumstances
   e. Plan of action

![Figure 2.1: HR Planning Process](image)

*Source: Michael Armstrong (2008)*

Michael Armstrong (2008) cursed out the process of human resource planning (HRP) that it is not necessarily a linear one, starting with the business strategy and flowing logically through to resourcing, flexibility and retention plans. According to Hendry
Theoretical Review

Chapter -2

(1995), the process of HRP may be circular rather than linear, with the process starting anywhere in the cycle. For example, scenario planning may impact on resourcing strategy, which in turn, may influence the business strategy. Alternatively, the initial point could be demand and supply forecasts which form the basis for the resourcing strategy. The analysis of labour turnover may feed into the supply forecast, but it could also lead directly to the development of retention plans.

According to Milkovich & Boudreau (1993), Ferjenčík & Bosáková (2001), the basis of every planning process has the following key questions:

a. What is the present status? (Determine the external and internal environments and conditions for employees)

b. What will be the future scenario of the organisation on the basis of strategic forecasting? (Put the objectives in human resources area which replicate the pursuit of efficiency and uphold a corporate ethnicity.)

c. How to ensure this change? i.e. Use strategy (Select appropriate activities and assign resources)

d. How do we achieve the goal? What is the present status? (Measure the results in terms of the original objectives, than the whole process begins again.)
2.5.1 Strategic Human Resource Planning Process

- Establish Business Objectives

Starting from the very beginning, the organization needs to identify what they are setting out to achieve. The key stakeholders normally come to an agreement which will lead the path to HR success.
Chapter -2  Theoretical Review

➢ Estimating Available Human Resources

Estimating current labour supply can help in knowing the better allocation to achieve the business goals, which requires taking care of peoples’ skills, experience and capabilities. Looking beyond the internal personnel, the organization must consider for external resources and labour markets too, which will help in prioritizing HR aspects for smooth functioning of the organisation.

➢ Use of Gap Analysis to Identify the Areas of Need for HRP

“Gap analysis” emphasises on the dissimilarities between the current status of business in its present state and where it wants to reach. The earlier plan of actions will disclose those discrepancies, but it’s important to formulate them clear and map out exactly where they stand in the organization. Concentrating on areas with the major gap between current and needed human resources can help to explore areas where investment will be most advantageous.

➢ Design and Launch related Programs to HRP

Every organisation has varied roles. HR programme is one among them. Other goals are linked with strategic goal, need of the future, technological changes etc. Generally it has effect on recruitment, selection, training, employee engagement, performance management, and retention strategies. All the further programmes are related to HRP so those may be launched more emphatically to make a strong linkage.

➢ Measuring, Monitoring and Evaluating Programs

It is not possible to settle on program success without measurement, monitor and evaluate the programmes. One has to make sure that there’s proper measurement, monitoring and evaluating the strategy in place is critical. Otherwise, one is flying blind. Properly measuring and evaluating programs will further help meet business objectives by revealing where resources yield the best investment – and what other programs still need work.

For the growth and development of organization, HRP plays an integrated role of continuous planning (Arya, 1989). The factors of the process of human resource planning are:
a. Level of education, training, skill;
b. Physical and climatic condition;
c. Work habit and trends;
d. Labour relation climate and motivation;
e. Strategy requirement;
f. Level of competence, supervision and technical guidance.

2.6 Elements of HRP

The human resource plan has four major elements

- Utilization
- Supply
- Training
- Personnel policy

2.7 Approaches to Human Resource Planning

Different authors used different names for different approaches to human resource modelling and forecasting, (Fooks et. al, 2002). In general four approaches are followed. They are supply forecasting, utilization or demand forecasting, need-based planning and benchmarking.

According to Bowey (1975), “human resource planning is divided into three broad categories of activities. First, there is an evaluation of future employee requirements, which is most likely, ought to be imitative from projected business expectations. Second, she has emphasised on the organisation’s ability to retain its current workforce, and has recommended any replacements which may be necessary. Ultimately, there are predictions which have to be made about the ability of the organisation to acquire or attract different kinds of employees from the external labour market.

On the other hand, Bramham (1975) opines on human resource planning that it comprises four main activities like investigating, forecasting, planning, and utilising. The first step, investigation provides an analysis of the external environment; it does review of the external labour market, and an audit of the internal labour market. Second, forecasting focuses on the future and projected requirements and the potential supply of that labour
from within and outside the organisation. Third, planning involves turning forecasts into personnel and development policies for recruitment, training and development, control of absenteeism, employee motivation and reward. The final step, utilisation, which requires the human resource plans to be compared against targeted and important measures to adopt for organisational success, such as customer satisfaction, development of product quality.

Human resource planning as process, determines the need of organization’s human resources in present and future, with three specific approaches (Frantzreb, 1981). The approaches are highlighted below as: quantitative approach, qualitative approach and mixed approach.

2.7.1 Quantitative Approach to HRP

It enlightens the required number of employees rather than individual characteristic of employees which depicts as traditional approach and hence, it is called as management-driven. It is also called as top-down approach. It is the base of Human Resource Information System (HRIS), Demand Forecasting Technique (DFT), and Work Study Technique (WST).

Explicatively, the human resource information system provides data about name, designation, educational qualification, working experience, salary, allowance, performance and updated data of existing human resources.

2.7.2 Qualitative Approach to HRP

It emphasises on the personal aspect of individual rather than required numbers of employees. It is called as employee-driven and also known as bottom-up approach. It focuses on the qualitative approach of human resource planning which is mainly concerned with matching the organizational needs with employee needs; employee remuneration and incentive plans; recruitment, selection, training and development; career planning; promotion and transfer; employees’ safety and welfare, congenial working environment; motivational activities, maintenance etc.
2.7.3 Mixed Approach to HRP

It combines the quantitative and qualitative approaches to strike a balance between the two to provide a mixed facility. This approach of human resource planning produces better result because than those of qualitative and quantitative approaches as it neutralises the requirement.

2.8 Human Resource Information System (HRIS)

2.8.1 Introduction

Human resource information system plays an important role in human resource planning process. It is the initial step of the entire process of an organization. It helps HR professionals to take right decisions analysing past records stored in system. However, many companies implemented HRIS as a standard module including general record keeping and skill inventories but few of them considered more stylish than what Hennessey (1979) has described as an integrated data processing system.

Gerardine DeSanctis (1986) stated that HRIS draws the sketch of combination between human resource management (HRM) and information technology. Aptly described by Kavangah et al., (2007), human resource information system (HRIS) is a computer based information system or software which is used to receive, store, analyse, control and manipulate, retrieve and distribute data or information linked to human resources in an organization. It includes not only the hardware and software but also the employees, forms, policies, procedures which help the organization taking decisions faster and accurately. It also helps the organizations by making automated HR planning functions.

As the organizations depends upon HRIS for collecting, managing and reporting of information to take decisions, it becomes a key strategic tool since organizations believe HR planning is a major factor for growth of the organization. Organizations should interface HRIS with their different departments for facilitating and enhancing the communication between inter-departments such as payroll system, attendance, material handling and accountancy system.
Decision Support Systems

Stoh & Viswanathan (1999) states that, the main purpose of decision making technologies is to augment human decision making—to take better decisions accurately, swiftly, and with visibly less expenditure of attempts. Whereas every decision support system technologies automates the decision making procedure and eliminate the human aspect, decision support systems (DSSs) are envisaged for use in circumstances where human inputs are indispensable because the decision condition is wholly programmable. In every decision support systems human opinion and perception are required (Gorry & Morton, 1971), so the function of the computer is to supply of models to make smooth the progress of the decision-making process (Alter, 1977). People need the computer because of the intricacy of a given decision, large number of information, and the countless decisions that claim concentration beyond human capacity (Shafritz & Ott, 2001).

Automated Human Resource Management Information System facilitates in formulation of human resource planning; while Demand Forecasting Technique (DFT) uses trend analysis, mathematical and economic models, as most of the demand forecasting methods and Work Study Technique (WST) uses interview, observation, time and motion, diary etc for determining the quality and standard of work.

2.8.2 Definition of HRIS

The main function of the HRIS is to provide service, in terms of accurate and timely supply of information, to the “users” or “clients” of the system. There are different types of potential users of the information related to human resources, which are required to use in taking strategic, operational and tactical decisions to avoid problems or litigations, to access the practices, policies of human resource planning process and or to support day to day operations. All these uses indicate that there is a necessity of that data and reports, which must be accurate and well-timed so that the “user” or “client” can understand how to use the information. The HRIS is considered to support activities of human resource management like planning, administration, decision-making, and controlling. Human resource applications such as employee recruitment and selection, salary, pension and benefits management, appraisal and training projections and career planning are supported by this information system. It also evaluate the employee productivity and helps in
monitoring the level of effectiveness of the organization. The systems and processes try to help the organization keep the customers perception in mind, since quality is mostly defined and operationalized in terms of total customer satisfaction (Evans, 2005). Keeping the demand, faster changing mind of the customer and competitive market, the organizations have to integrate the activities of each of its functional departments. An efficient and effective HRIS helps by providing the technology to produce accurate and appropriate employee information to fulfil the aim and objective of the system.

Human Resource Information System (HRIS) may be stated as a set of individuals, forms, actions and data used to accumulate, analyze, share out and utilize information on human resources. HRIS’s objective is to provide correct information for make use of persons, who are responsible to take decisions of human resources. HRIS is well designed to trim down the blue-collar work of HR expertise in the organization. It helps to dispose of paper works like filling up the forms and reports as all the information is obtainable through the system. HRIS offers absenteeism reports, purposeful planning as well as head count and wage calculations. The HRD department keeps the employees record individually including personal history, area of expertise and remuneration etc. (DeNisi & Griffin, 2001). The fundamental level of HRIS is used to assist the manager to maintain the employment relationships and working environment within the organization and the employees. Most of the organizations in this present era are using HRIS for human resource planning. Fresh recruitments can be posted through HRIS as well as applications forms of the job seekers can be scanned and stored for future use. Information can be retrieved about the period of participated training and learning session of the employee. HRIS can easily maintain the performance reports of an employee, performance appraisal, rewards and compensation, perks and benefits, expertise area and development plans etc. Employees are able to explore new career within the organization and be alert of the trainings held in future. It permits managers to follow the job performance and estimated versus used hours for a particular assignment. As different reports are available through HRIS, HR managers can be able to easily run the reports to trace skilled employees to perform the certain job, through reports it is easy to access information about the absences, vacation, leave, communication skills, and many more. HRIS includes different standard reports but it also gives permission to the user in generating other reports (DeNisi & Griffin, 2001).
The threat of investing in the faulty technology is that it can have a unsuccessful long-term result on strategic planning process and therefore it is very much vital that the anticipated key technology should recognize both the significance of current support and the potential for future that may effect when business situations are in turbulent condition. Further, the intricacy and investment of the decision support system will also depend on the height of management decision making that is mandatory Williams, (1997). There are three levels of information management;

i. Strategic – In every organization, the top and senior management employees require strategic information to direct the organization as a whole. They usually involve in planning and making decision for growth, survival, and prosperity of the organization. Such types of information are mostly derived from external sources, so the information systems for this level of management are sophisticated, costly, demographically analysed and market oriented.

ii. Tactical – It is used by middle-tier management to execute plans by choosing appropriate tactics in an organization. At this stage the information is concerned with present use of resources, performance of employees and short-term forecasts. Information systems may be varied and use data from both external and internal sources at this level depending upon the organization’s culture and stage on its life cycle.

iii. Operational – It is requisite for day to day running of the functions by the employees of junior management. This information from operational data mainly from within the system are very detailed and derived in nature at this level. However some external information may be vital when customer sales and services, and dealer services are to be analysed.

Pyburn (1983) opined that information system has become gradually more important to the organization for successful implementation of corporate strategy. Tanriverdi and wade (2006) also viewed information technology as a strategic organisational resource for an organization. Williams (1997) states that information system strategies could be casual, inspirational or could be the outcome of cautious analysis and detailed planning. However, it cannot be accepted in every situation as it is. The most
intellectual option is to study the organisational long-term plans, objectives and develop information system strategy at business level rather than having random or unarticulated thoughts about information system strategy. Then an organisation can bring into line the information system strategy with not only with the corporate strategy but also with other strategies like business and HR.

2.8.3 Growth of HRIS

The creation of real time information based self service and good working environment are possible in organizations due to recent developments in technology and information system. Human resources information systems have changed from the computerized employee recordkeeping from the 1960s into more multifaceted reporting and decision systems of late (DeSanctis, 1986). Today, managers and employees are assuming activities once considered the domain of human resource professionals and administrative personnel. This symbolizes a significant break with the past, but an enhancement in overall organizational effectiveness. As a result, both managers and employees respond faster to changes done by the authority and relevant accessible information for decision making (Lengnick-Hall, 2002).

2.8.4 Use and Need of HRIS

There are a number of advantages to the organizations in using HRIS. They include:

a. To provide the comprehensive information picture as a single, comprehensive database; this enables organizations to provide structural connectivity across units and activities and increases the speed of information transactions;

b. It helps in increasing competitiveness by developing HR operations and improving management processes.

c. It ensures in collecting proper data and altering them to information for improved suitability and quality of decision making.

d. To produce a larger number and different type of accurate and well synchronized HR related reports;

e. Reorganizing and improving the efficiency and efficacy of HR managerial functions;

f. Reengineering HR functions and applications;
g. Improving worker satisfaction by conveying HR services more swiftly and accurately.

In accessing the advantages and impact of HRIS to an organization, distinctive accounting methods and HRM functions could not work parallel (Beacker et al., 2001; Cascio, 2000; Fitz-Enz, 2000; Huselid et al., 2005; Thite, 2004; Ulrich & Smallwood, 2005). While there are numerous substantial benefits in applying an HRIS in an organization, such as pay-roll management and redundancies of manpower. There are many intangible or hidden benefits as well, which include employee satisfaction with well-organized and efficient HR processes (Roberts, 1999).

Presently HRIS functionality includes corporate communications, staffing, training, opinion survey of employees, payments, payroll services and verification of employees as well as common information. HR professionals use HRIS to support their plans and talent management programs by allowing some specific functionality, such as human resource planning (HRP), employee development, benefits management, and performance appraisal system, (Beulen 2009).

2.8.5 Types of HRIS

Computer based system can be classified with multiple typologies. However the most basic types of systems which are used within an HRIS are Electronic Data Processing (EDP), Management Information System (MIS) and Decision Support System (DSS) (Sprague & Carlson 1982).

EDP- It was applied first to computerize paper work, may be called as the primary electronic storage of information. The basic characteristics of EDP include:

a. A centre of attention on data, storage, processing, and flows at the potential level;
b. Well-organized transaction processing;
c. Planned and optimised system runs;
d. Incorporated files for related works;
e. End reports for management.
MIS- The characteristics of MIS includes:
   a. It aims at middle level managers.
   b. Flowing of structured information;
   c. Integration of EDP jobs by business function;
   d. Generation of inquiries and reports.

DSS- It emphasises on the following characteristics:
   a. It is decision focused.
   b. It aims at top level managers and executive decision makers.
   c. Give importance on adaptability, flexibility and quick response.
   d. It is initiated and controlled by the user.

Kavanagh et al. (1990), identified a different type of HRIS, which must be used in organizations to make best use of the effect of computer generated knowledge on managerial decision making in Human Resources Management Decision System (HRMDS). In this type, the characteristics of HRIS are as follows;
   a. Report information and generation based on identified managerial needs for decision making.
   b. Making category of reports by level of management;
   c. Generate report depending upon their use by the managers: daily, weekly, monthly.
   d. HR professionals can review the previous results, which are stored and retrieved as and when required by the user.

Ngai and Wat (2006) also focused on two different types of HRIS according to their usage; i.e. Unsophisticated and Sophisticated. Salary and benefit management and employees’ attendance records keeping etc. are listed as unsophisticated, as it is an electronic reproduction of the files used by the HR department, it is also called as “Simple Minded Automation”, on the other hand, sophisticated HRIS is classified into: utilization of information system (IS) for HR planning, recruitment, selection, training, and performance appraisal. As this type of support decisions are involved with expert judgements, a qualitative strategy is required to an expert systems approach.
2.8.6 Function of HRIS in Human Resource Planning

Human resource planning (HRP) is to ensure that exact number and blend of workers are available at the right time at proper place (Parker and Caine, 1996). The sustainability of any organization and problems associated with the HR planning process depends on the successful implementation of human resource planning. Parker and Caine, (1996) also stated that organizations which are large in size implement HRP systems, and some are trying to use it depending on Markov Chain theory. There is an impact on strategic human resource planning as the technology develops day by day. Human resource information systems are electronic systems that accumulate information in databases and can easily retrieve for analysis as and when required. Many of them are fully automated for calculation of salary and benifits, payroll calculation but some software need to keep data and paper records manually. Human resource information system stores the data of an employee and keeps track on it like demographic information and job profile which are very much essential at the stage of recruitment, progression planning, diversification, expansion of units etc.. HRIS helps the user to run reports to find out items such as how many employees employed last year, average length of service, turnover rate of employees etc.

HRIS provides a base if a set of analytical tools that assist managers in establishing aims and in evaluation of the results of the organization’s HR programs. An effective HRIS serves as the key management tool for arranging in a line or human resource departments’ objectives with long term planning goals (Chauhan et al, 2011).

It may be concluded that HRIS is a automated computerized system that supports in processing of information related to human resource management and has become a vital element in organizations. It is considered as a tool which is intended to fulfil the human resource information needs of an organization. As a result the importance and role of HRIS is increasing upwards, starting from operational management to increased productivity by reducing manpower and labour costs for HR departments and providing well-timed and diverse information to the management of the organization (Aggrawal and Kapoor, 2012).
2.9 Human Resource Demand Forecasting

Forecasting human resource requirements has traditionally utilized one of three basic approaches: "utilization or demand based," "supply based," and "needs based" (Fooks et al., 2002).

According to Aswathappa (2009), “demand forecasting is the practice of estimating the prospect of quantity and quality of human resource”. The input here is not to look at the skills and capabilities of the present employees but to decide skills and abilities required by the employees to meet the future strategic objective of organization (Byars and Rue, 2000). Rao (2010) viewed that demand forecasting includes existing job design, and investigation may thoroughly be reviewed keeping in view the future skills, knowledge and abilities of present employees. It is viewed by Mohanty and Deshmukh (1997) that the human resource planning process is highly related to the external factors such as supply and demand of labour/employees.

Demand forecasting is the process of estimating the future quantity and quality of people required in the organisation. Demand forecast must be based on the annual budget and long term corporate plan that is translated into activity levels for each function and department. Organizational goals and objectives also serve as a starting point for forecasting of human resource needs. The demand for man power is derived from the demand for an organization’s goods and services. Economists view that, if other factors are held constant, the increased demand for goods and services leads to an increased demand for labour. Inversely, a decreased in demand for goods and services leads to a decrease in demand for labour. Human resource forecast can be short-range, medium range, or long-range, depending on how far the future goals are set by the employer. There are some methods or approaches developed by the management scientists, which are more appropriate to short-range forecasting while others are designed for long-range forecasting. However, any human resource plan to be effective must be derived from the holistic approach, that is, long-range plans of the organization. Once the factors affecting the future manpower forecasts are identified, smooth planning can be done for the future manpower requirements in concerned work units or departments.
The tools to process human resources requirement forecasting are:

2.9.1 Human Resource Demand Forecasting Techniques

The analysis of jobs and reflection of varied relevant factors are taken as variables to plan strategic human resource. According to Aswathappa (2009), “demand forecasting must have to consider several factors: both external and internal environments”. The external factors include competition, economic climate, laws and regulations, changes in technology, and societal factors, where as the internal factors include budget constraints, production levels, new products and services, organization structure, market growth and employee attrition (Armstrong, 2006). Techniques to forecast human resource demand are described as scientific and subjective.

2.9.2 Management Science Techniques

Greer (2001) states that various techniques like both linear and integer programming, network optimization techniques are generally used to measure the operations research for smooth operation. Similarly, management science techniques are also used for measurement. Such techniques can be used to determine optimal employees’ flows through organizations (Bhattacharyya, 2006, Janert, 2006). The optimal flows can be handled through specification of time-in-grade which needs for promotions, rates of turnover etc. But the managed flows can produce desired stocks of personnel in a variety of positions or grades at different points in the future. A supplementary extension of linear programming, known as goal programming, allows HR planners to take into deliberation chronological and multiple managerial goals or restrictions, such as, utmost head counts, budgetary constraints etc (Verhoeven, 1999). The goal programming, exercised by Verhoeven, has been able to reflect the HR planning model which can be used in the same employment opportunity. According to Verhoeven (1999), the use of such human resource planning techniques run contradictorily to the trend towards more dependence and less sophisticated approaches. However, such techniques are immobile but very important which influence the service capability and profitability of major corporations and governmental organizations. However, HR planning systems based on these techniques which need mathematical sophistication and complex computer programs (Bhattacharyya, 2006).
The mathematical techniques by the help of systems are expensive to develop. However, they are the habitual major systems in large organizations, which create savings of millions of rupees in employee costs. These systems are developed by HR planning specialists, practitioners and researchers. The systems are managed by front level managers for applications such as the development of optimal workforce schedules, although they are urbanized and preserved on a centralized basis (Bhattacharyya, 2006).

Forecasting human resource may depend on trend projection, use of higher statistical tools and qualitative methods. Schwind et al. (2002) classified all these approaches into three categories of forecasting human resource demand. The expert forecasts (qualitative way of forecasting human resource requirement), trend projection (extrapolation and indexation) and other forecasting methods. Based on Schwind et al. (2002), Bhattacharyya (2006), Greer (2001), Armstrong (2006) and Verhoeven, (1999), the different forecasting techniques are in the following manner:

**2.9.3 Trend Projections**

Schwind et al. (2002) suggested the two simplest methods. They are extrapolation and indexation. Extrapolation involves extending past rates of changes into the future. Indexation is a rough estimating method for future employment needs by corresponding development of employment with some index. These issues depicted in the following common methods (Greer, 2001).

**a. Indexation Methods**

**Analysis of Productivity:** Bhattacharyya (2006) states that forecasting of demand is controlled primarily by two major factors i.e. output volume and height of productivity. Human resource requirement may vary due to change in output volume or mix, which calls for performance analysis or appraisal systems (Armstrong, 2006). Similarly, as the level of productivity changes over time, it also involves human resource requirements. This calls for analysis of productivity. Productivity has two major components: technological change and human resource utilization (Bhattacharyya, 2006). As technological changes need huge capital investment, organizations appear for better human resource utilization to accomplish increased productivity. With improved human relation, productivity can be increased. Again level of productivity substantially differs from the level of performance.
Human resource demand forecasting can be prepared more effectively, once both the variables are judged, i.e. the performance and productivity (Bhattacharyya, 2006).

b. Analysis of Workload Factor: Work study or workload method is based on investigating the quantity of people necessary to assume individual tasks or processes effectively and efficiently. It is usually associated with long run production or procedure operations where the work is simply broken down into discrete tasks (Parker, 2004; Mellett, 2000). Work study techniques can be utilised when there is a need of measurement of work to estimate the time and number of employee required to complete the work assigned (Torrington et al., 2005; Bhattacharyya, 2006). To estimate the required number of indirect workers, the ratio trend analysis must be combined with work study methods for direct employees (Armstrong, 2006; Torrington et al., 2005; Bhattacharyya, 2006).

Workload analysis is vital to forecast human resource necessities at different time. Analysis of workload for current and future depends on the prospect of the work content in each part of an organizational action (Torrington et al., 2005; Mellett, 2000). Work study method is generally classified as an objective measurement, nevertheless, it possibly will be deemed as a subjective method as it is frequently used since the development of standards and the combination of tasks is moderately dependent on human judgement (Torrington et al., 2005; Armstrong, 2006; Bhattacharyya, 2006). Bhattacharyya (2006) described the following procedures of work study or work load technique:

1. Classification of work: this is done by identifying the work or job component and time requirement for each job or work unit. Work or job classification helps in breaking jobs in different components, which together completes an operation. Time requirement analysis for each such job components can be done by deciding the standard time, using work measurement techniques. This may not work in jobs like service handling or customer handling, administrative or managerial job etc... This can be measured by using past experience and benchmarking.

2. Forecasting the number of jobs: quantitative aspect of number of jobs done is computed for a time period.

3. Exchanging the projected job into a man hour: multiplying the time requirement of each job with the number of planned jobs, man hour for jobs is computed.
Converting the man-hours into human resource needs: in the closing step the collective man-hour are converted into human resource requirements. This is done considering leave reserve, normal fatigue allowance, etc..

2.9.4 Extrapolation Methods

**a. Time Series Analysis:** According to Armstrong (2006), and Parker (2004), this can be determined through the analysis of the ratios in past, i.e., the ratio between the number of direct workers (in works area) and indirect workers (non-works or supporting) in a manufacturing plant and to forecast future ratios, keeping some permission for changes in organization or methods Wong (2004) and Parker (2004), declared the basic characteristics of time series extrapolation on the forecasting manning levels is its constraint on the stochastic information by examining a relationship exclusively between the past behaviour and time and then extrapolating the trend into the future. Activity level forecasts are then used to find out direct labour requirements, and the forecast proportion of indirect to direct would be used to estimate the required quantity of indirect workers (Parker, 2004). It is not distinct model of calculating human resource requirement of the future. It is group of greatly independent computation mechanism (Bhattacharyya, 2006). Fluctuation in level of employment (Parker, 2004), over a time period, changes in employment in relation to some particular event, seasonal fluctuations, sudden changes in employment level due to economic environment or rise in market share, and random fluctuations (fluctuation follows not obvious pattern) used to forecast human resource strategically. Moving average and exponential smoothing methods are described as an example below:

**b. Moving Average Method:** Hyndman (2009) noted a moving regular as a time series constructed by enchanting averages of several sequential values of another time series. It is a type of mathematical convolution. Hyndman also points out that other generally; weighted averages may also be used. Moving averages are also called running means or rolling averages. They are a special case of “filtering”, which is a general process that takes one time series and transforms it into another time series. The term “moving average” for Hyndman (2009) is used to explain this procedure because each average is calculated by dropping the oldest observation and including the next surveillance. Bhattacharyya (2006) revealed that under this method, average of the united employment level data for the latest past is considered as the forecasted employment level for the next stage. This technique is
valuable to guard against arbitrary fluctuation. However, it necessitates careful selection of time periods, which may be a 6-period, 10-period, 12-period moving average. If the time period is chosen too less, we may obtain wide variability in our forecast. Therefore, allowing for more time periods, we get hold of better results.

c. **Exponential Smoothing**: Janert (2006) and Bhattacharyya (2006) illustrated that whenever we want to chase the development of some random amount over time, we are dealing with a Time Series. In moving standard method, we need to carry forward a huge volume of historical data. We cannot get rid of the need for such past records by assuming this method. Smoothing describes a decision maker’s affinity to gradually react to alterations in information. Stange (1999) and Bhattacharyya (2006) stated that “smoothing appears commonly in human decision making”.

d. **Subjective (Qualitative) Method of Human Resource Demand Forecasting**: Subjective methods are those forecasting techniques which use directly the knowledge, experience and judgements of experts (Greer, 2001). The request of subjective methods for human resource necessity forecasting may be useful to assess directly the future human resource requirement, but also to predict explanatory variables by collecting the opinions of management on the organization’s performance in the future, technological modifications, organization structure etc.. The study conceptualized this into:

1. Heuristics and Rules of Thumb
2. Collecting management opinion
3. Delphi method
4. Nominal Group Method

i. **Heuristics and Rules of Thumb**: Greer (2001) stated thumb rules are easy guidelines that are used to predict demand for human resources. For example, a retailing chain may have developed a heuristic that specifies that for every 12 new stores, another regional manager will be hired. Heuristics are conceptual frameworks, often expressed as diagrams, which help human resource forecasters organize relevant conceptual relationships and trace through the outcomes of various personnel action alternatives.
The most frequently used qualitative approach to forecast the demand for human resources in an organization is the “bottom-up” approach in which unit managers estimate their specific human resource needs for the next period (Greer, 2001). These estimates are then combined into aggregate forecasts for the whole company.

ii. **Managerial Judgement:** It is the most distinctive method of forecasting and may possibly be linked with some form of scenario planning. It simply requires the management people or managers or experts to sit down, presume about the future workloads, and decide the quantity of people needed in the future to accomplish the work (Armstrong, 2006; Torrington et al., 2005). This is only a deductive reasoning or guesswork unless there is reliable evidence presented to forecast increases in activity levels or new demands for skills. Forecasts can be made on top management rank for the whole organization on the level of division of managers for their department (Verhoeven, 1999; O’Brien-Pallas et al., 2001; Torrington et al., 2005). In the latter case, if the figures have been given lacking commitment, the forecasts might be overestimating in order to certify certain human resource vigour in the future. According to Bhattacharyya (2006), a manager has to formulate a judgement about the future employment level. Such judgemental decision is supported on his past experience, which they relate to past occurrences of some events and its effects on human resource plans (Torrington et al., 2005). He has to use his judgements considering contingencies. Combining quantitative tools with managerial judgement yields for better results (Bhattacharyya, 2006).

iii. **Delphi Method:** The word “Delphi” has come from Greek. In Athens of Greece during ancient time, it was a convention to consult an oracle representative of God Apollo who was believed to have contacts with God. The advice of the oracle at that time could only be interpreted by the priest (Cuhls, 2003). In current times, this method is effectively a group process to achieve a consensus forecast (Torrington et al., 2005, Greer et al., 1995).

This method calls for selection of a panel of experts moreover from within or outside the organization, whose comments are crystallized from a sequence of
questionnaires reply and then used as the source of forecast (Bhattacharyya, 2006; Torrington et al., 2005; Armstrong; 2006; Parker, 2004). Qualitative demand forecasting technique occasionally requires expert opinions and depends upon an interactive judgement refinement technique. This technique can come closer to the accuracy of quantitative techniques without requirement of any historical database. However, a very few organizations used the Delphi technique for such purposes (Greer, 2001, Skulmoski et al., 2007).

According to Cuhls (2003), the preliminary work was performed at RAND Corporation after 1948 or 1940s (Verhoeven, 1999; O’Brien-Pallas and et al., 2001). First time a huge Delphi survey was printed in the civil sector in the year 1964. Between couple of years Delphi technique leads in further development and there is a wide application of this technique taken by Japan (Cuhls, 2003).

The Delphi method is a structured survey created by experts and professional. It creates utilization of the perceptive available information of the experts. Hence, it bears both qualitative and quantitative results and under the explorative, analytic even normative elements. This conclude that Delphi technique is a method where expert analysis is conducted for two or more rounds and the result or grade of the analysis done first becomes the feedback of the next round of survey (Cuhls, 2003; Parker, 2004). Therefore, the experts respond from the second round on under the weight of their colleagues' opinions. Thus, the Delphi method is a 'relatively strongly prepared group communication process, on which naturally hesitant and incomplete knowledge is available, are judged upon by experts (Häder and Häder, 1995).

Delphi method consists of (Verhoeven, 1999; O’Brien-Pallas et al., 2001) the collection of experts’ information in a structured way. The Delphi method is special procedure to obtain management opinion.

iv. Nominal Groups Method: For Schwind et al. (2002), this method refers to "structured meeting that identifies and ranks problems or issues affecting a group". Like Delphi method, nominal group method also involves a panel of experts. However, the main difference between the two is that while under Delphi
techniques, experts are not allowed to discuss among themselves, for assessing the questions, under nominal group method experts are given the chance to discuss among themselves (Parker, 2004; Cuhls, 2003). Under this method, the coordinator assumes the role of facilitator, permitting the experts to be seated together to discuss their views and records of such discussions are made on fillip chart. After this round table discussion on ideas, experts are asked to rank their ideas according to their perceived priority (Bhattacharyya, 2006).

2.10 Forecasting Human Resource Supply/ Availability

Forecasting supply or availability of human resources involves ensuring the quality and quantity of personnel will be available both from outside and within the organization. According to Torrington et al. (2005) employees are not fixed, they will change, initially it is necessary to estimate how many will leave, how many will be internally promoted or transferred from or to other departments to fill up the vacancies. These shifting of employees are forecast by analysing the past happenings, in terms of attrition of staff/ withholding the job and/or movement from one organization to another, and forecasting this into the future to observe what will happen if the same type of situation would occur or same trends will sustain in future. The impact of ever changing situations would also need to be taken into consideration while projecting analyses forward.

The major sources of supply of human resource are internal and external: People already employed by the organization and those from the outside of the organization. HR professionals and managers normally consider employees while estimating or forecasting the supply of personnel include promoting workers from one stage to nest higher stage within the organization; identify employees willing for training or already trained; search for talents available from the local and regional labour market; resourceful and capable students from colleges and university.

Bell, (1989) focused as a detailed coverage of possible reasons of attrition and analysis of internal movements. Behavioural portions are also important, such as finding the reasons why employee leaves, the criteria that distress promotions and relocation and changing in working conditions and in HR policy (Hirschman, 1998).
2.10.1 Internal Supply

Internal supply may be considered as when employee moves from his current job to other job in respect through inter departmental transfer, promotions, lateral moves, etc. It is also considered that, training and development programs, transfers of employees, promotion policies of the organization, and superannuation rules and policies, influence the supply of internal employees (Torrington et al., 2005).

Internally forecasting of supply of human resources for certain positions succession planning method is widely used in human resource planning process (Torrington et al., 2005; Greer, 2001; Bhattacharyya, 2006). It relies on alternative charts, those are succession plans build up to classify potential personnel changes, motivate employees, to select sponsorship candidates, and keep close eyes on attritions (resignations, superannuation, death etc) for each and every department within an organization.

2.10.2 External Supply

Every organization should ensure the supply of employees to fill the vacancies through external supply with respect to quality, quantity and time. The estimation of required employees for the organization is required. Extensive use of government, labour force population estimates, trends in the industry, and many more multifaceted and interrelated factors must be considered (Hirschman, 1998). Here are some of the factors that may be considered: net movement into and out of the area, individuals entering and leaving the workforce, individuals graduating from schools and colleges, changing workforce composition and patterns, economic forecasts for the next few years, technological developments and changes, actions of competing employers, government regulations and pressures and factors affecting persons entering and leaving the workforce (Greer, 2001; Armstrong, 2006).

2.10.3 Outsourcing

In today’s world, outsourcing plays significant role in every organization which is a planned initiative. Diana and Hoover, (2006) found five generic human resource supply chain (HRSC) models acknowledged in two broad categories: that is, two in-sourcing
models as ‘Local contracting’ and ‘HR centralizing’ and three outsourcing models as: ‘Purchasing HR’, ‘Non-staffing HR’ and ‘Staffing HR’

These are discussed below:

1. Two in-sourcing:
   a. Local contracting
   b. HR centralizing

2. Three out-sourcing:
   1. Purchasing HR
   2. Non-staffing HR
   3. Staffing HR

2.10.4 Local Contracting

An age old method has been continuing in staffing as ‘local contracting’ which has been predominantly ruling among traditional models for outsourcing staffing with non-core employees. The job of a client firm is to provide staffs to the vendors to meet temporary staffing needs for any kind of fluctuations like: seasonal, employee absences, and special projects. The hiring decisions are generally based on the accuracy of individual’s decision power and vision.

Advantages of using the local contractors’ method:
1. It provides high touch and high quality of services from the staffing vendors.
2. There is minimal bureaucracy.
3. It facilitates to empower the hired managers and to hire always the qualified employees to get the job done.

Disadvantages of using the local contractors’ method:
1. Diversions for hiring managers to deal with enrolment vendors;
2. There is an increased cost from non-standardization of hiring practices and procedures across the client firm.

2.10.5 HR Centralizing

HR centralizing is needed when the HR department standardizes the staffing process to drive costs down of temporary workers. This tends to occur when a notable size
of non-core employees reach a certain ratio of core employees. The critical percentage is
dependent on an amalgamation of firm and industry conditions. HR is directed to take on
the responsibilities for managing the logistics of non-core employees time and again.

Advantages

- There is more uniform standards in hiring practices, billing rates, and pay rates.
- The constituent departments which hires managers can refocus their effort.

Disadvantages

- They induct the new departmental responsibilities in HR, which decreases
  outsourcing efficiencies for the organization.

2.10.6 Shifting of staffing vendors from HR to Purchasing

Earlier in small units HR was looking after purchasing vendors including its
employees. But gradually the management of staffing vendors have been shifted from HR
department to the purchase unit of an organization, which essentially will be a part of
procurement unit. The goal is to continue cost reductions by increasing efficiencies of the
employees by making them versatile.

Advantages of Purchasing HR

- It maintains organizational control over the hiring process.
- It applies the purchasing capabilities for greater standardization in hiring practices,
  pay rates, bill rates etc.

Disadvantages of Purchasing HR

- It encompasses the rigid application of supply chain management (SCM) techniques
to the hiring process.
- It treats the staffing suppliers and contract employees as commodity products.

2.10.7 Non-Staffing HR

Non-staffing HR handles the staffing trader for a client organization. When the
previous outsourcing models fail and/ or the percentage of indirect employees grow
continuously to achieve the expected results, organizations may employ outside non-
staffing vendor management firms to homogenize the hiring process and supervise their staffing vendors. A non-staffing vendor does not provide workers on a short-term period basis, but relatively operates between the customer and staffing trader.

**Advantages**
- It standardizes the hiring practices and bill rates.
- Timely generates information for vendors and clients.
- Single source invoicing and paying; hiring managers has single contact point.

**Disadvantages**
- It serves better relationship between HR manager and staffing vendor.
- Best vendors will not work with the low pay rate and remaining vendors do not necessarily provide quality service.
- Client firms receive commodity type service with low touch; decrease in vendor competition.

### 2.10.8 Staffing HR

The staffing firm model engages the selection of one staffing vendor to administer all the other staffing vendors to achieve cost reductions and manage the logistics of non-core employees.

**Advantages**
- The addition of staffing expertise to the VMS level; improved economic profitability for staffing vendor;
- There are many cooperative partnerships between the different stakeholders.

**Disadvantages**
- A serious lack of vendor neutrality where job orders are given to their own recruiters before sending them to other vendors.
- No staffing vendor competition.

### 2.11 Labour Market

The structure and functioning of labour markets are no doubt, related to the economic condition of production. The behaviour of labour market, in fact reflects the more fundamental process of production itself (Edwards et al, 1975) and the organizational
arrangements governing production. Accordingly, labour market functioning changes with a change in the internal production process in the economy. The change from competitive to segmented labour markets can be correlated to corresponding changes in economic sphere.

The classical economists in conformity with their assumption of perfect competition and full employment, considered all markets to be open and competitive in labour market. To them, any deviation of the market from equilibrium position was only a temporary deviation. To facilitate this process of equilibrium, wage flexibility can be used as a mechanism. It was again noted that any differences in this regard arises out of the inertia of the market mechanisms to respond and produce right signals in right time. Therefore, under this scheme adjustment of market mechanisms are automatic by the interplay of forces of demand and supply.

The functions of labour markets are:

a. Matching employees with jobs
b. Labour price fixation.

The labour market is divided into two segments
i. Primary sector
ii. Secondary sector

Both the sectors are distinguished between each other on the basis of employment and salary/ wages. Generally, primary sector is characterised by high wages/ salary rates and stable employment conditions, on the other hand secondary sector wages/ salary rates are low with unstable employment condition. Distribution of labour is controlled and managed by administrative rules and regulations. Internal market and external market both are different from each other; where pricing, training decisions, and allocations are governed by economic variables.

Labour market analysis is the substitute of conventional methods, which encompasses a policy come close to human resource planning (Castley, 1996). Labour market analysis requires an exceptional method of analysis of labour market and does not give satisfactory framework; otherwise it would stand to be more appropriate to national planning (Psacharopoulos, 1991).
2.12 Wastage Analysis

Wastage of human resource is a component of labour turnover (Bhattacharyya, 2006). Wastage of manpower is severance from the organization, which consists of superannuation, voluntary retirement, resignation, deaths and dismissals (Parker, 2004). Marginal recruitment decision without wastage analysis may lead to inaccuracies in HRP. Different methods of wastage analysis in manpower supply forecast (Bhattacharyya, 2006) are: labour turnover index, stability index, cohort or length of service analysis, and census analyses are:

2.13 Annual Labour Turnover Index

The analysis (Armstrong, 2006; Torrington et al, 2005; Greer, 2001) of the numbers of people leaving the organization (labour turnover or wastage) provides data for use in supply forecasting, so that calculations can be made on the number of people lost who may have to be replaced. Armstrong (2006) indicated that rates of labour turnover provide a graphic illustration of the turbulence within an organization. According to Torrington et al. (2005) and Parker (2004), this measure has been criticised because it gives only a limited amount of information. If, for example, there were 25 leavers over the year, it would not be possible to determine whether 25 different jobs had been left by 25 different people, or whether 25 different people had tried and left the same job. Length of service is not taken into account with this measure, yet length of service has been shown to have a considerable influence on leaving patterns, such as the high number of leavers at the time of induction (Bhattacharyya, 2006). This index indicates the number as percentage to average number of employees. Average number of employees in a given time period is decided by adding the employees at the beginning and end and then dividing the same by two.

Labour turnover index would be (Bhattacharyya, 2006; Parker, 2004) computed using:

\[
\frac{\text{Number of employees leaving during the year}}{\text{Average number of employed during the year}} \times 100
\]

or

\[
\frac{\text{Leavers in year}}{\text{Average Number of staff}} \times 100 = \text{percentage wastage rate in post during the year}
\]
Turnover is an important aspect of human resource planning. Workers sometime leave a farm or industry at their own instance. Occasionally they are ousted from an organization. New workers are employed in their places. Thus the composition of labour force changes from time to time. Turnover is the rate of displacement of personnel employed in an organization due to resignation, retirement, or retrenchment. If the rate of labour turnover is high, then it is a sign of instability. It adversely affects their efficiency as well as the profitability of the farm. As Flippo (1976), states “turnover refers to the movement into and out of an organization by the workforce, this movement is an index of the stability of the workforce”.

2.14 Stability Index

The stability index is considered by many to be an improvement on the turnover index (Armstrong, 2006; Bhattacharya, 2006). Armstrong noted that this index provides an indication of the tendency for longer service employees to remain with the company, and therefore shows the degree to which there is continuity of employment. But this too can be misleading because the index will not reveal the vastly different situations that exist in a company or department with a high proportion of long serving employees, in comparison with one where the majority of employees are of short service. This index indicates stable workforce percentage for a given period and can be computed as under

$$\text{Stability Index} = \frac{\text{Number of employees with one year or more years services now}}{\text{Number of employed one year ago}} \times 100$$

2.15 Cohort or Length of Service Analysis

Disadvantage of the stability index can be partly overcome if an analysis is also made of the average length of service of people who leave (Armstrong, 2006; Torrington et al., 2005; Parker, 2004). Cohort means homogeneous groups. Cohort analysis takes into account the lengths of service, which are important variables of wastage analysis. Cohort analysis tracks what happens as some people leave a group of people with very similar characteristics who all joined the organisation at the same time; this therefore eliminates the defect of labour turnover index (Torrington et al., 2005). Cohort analysis is more
accurate for small homogenous group and the disadvantage of this method of analysis is that it cannot be used for groups other than the specific group for which it is originally prepared (Verhevoen, 1999). However, hanging social and economic conditions can invalidate this analysis. It is computed by dividing number remaining at a given time over number engaged at the start multiplied by hundred (Bhattacharyya, 2006; Parker, 2004).

Cohort or length of service Analysis: \[
\text{No of employees remained after time} \ 't' \times 100 \\
\text{No recruited at start time} \ 't' \]

2.16 Census Analysis

One of the major deficiencies of cohort analysis is that it holds good for a small homogenous group. Census analysis can eliminate this problem, taking into account a cross-section of the organization, i.e. all the age specific wastage rates at given time and applying a smoothing algorithm to the resulting data to identify a general pattern (Bhattacharyaa, 2006). “Census analysis involves taking a snapshot of different cohort at a point in time and combining them to estimate survival by length of service” (Parker, 2004). Census analysis requires three sets of data as under (Bhattacharyya, 2006).

First the number of employees at the beginning of the census has to be considered. Second the number of employees at the end of the census and finally the number of leavers during the census period.

2.17 HR Audit

Basically audit is a term specially and usually related to finance. In finance the term is used to check the financial documents and reports of the organization. But in HR this terminology is used for the appropriate recruitment, job specification and documents supplied by the employee in an organization. Organizations having lesser number of employees or with no recruitment face lots of problem. Also organizations having employees in higher positions with lesser educational qualification or vice-versa face hurdles in achieving the success. On the other hand, is wasteful and costly for the organization. If sustained, it is expensive to remove because of present legislation in form of voluntary retirement schemes (VRS), redundancy payments, minimum notice period etc. Most significantly, overstaffing reduces competitive efficiency of the company (Aina, 2005). Human resource audit ensures the planning and controlling of human resources and
utilize the manpower effectively and economically to help the management within an organization, (Batra, 1996). A well organized audit provides a diagnostic tool to estimate human resources performance against organization vision and mission and the key areas that would help the organization to make profit. An audit signifies how an organization establishes where it currently stands and ensures what has to achieve to develop its human resource functions.

Human resource audit is neither always a learning tool nor a test which engages organized re-evaluation of all aspects of human resources keeping in mind all government regulations and policies sticking on it. It is an organized evaluation of the dynamism, weakness, limitation, and overall developmental aspects of existing human resources in the organization in context of organizational performance ( Sekhri, 2010 ).

As human resource function is charged with developing ethics, culture and a set of exercises that engage, maintain, develop and inspire high performing talent, an effective and organised human resource function also engaged in establishing work practices that allows the facts and potentials of all the members of the employees to become known and utilised effectively. So an human resource audit is very much functional to exhibit to what extent human resource function contributes to the organizational effectiveness as a whole. The objective of audit is to evaluate the productivity of investment on the human beings inside an organization.

A human resource audit is a methodical review of the human resource utility: its strategic direction, arrangement and resources, systems and process; cost and potential and ultimately its contribution to the organization. Human resource audit is a systematic assessment of the strengths, limitations and development need, its existing human resources in the context of organizational performance (Flamholtez, 1987).

HR audit is an inventory that catalogues each employee’s skill and abilities which enables the planner to have an understanding of organization workforce.
2.17.1 Aims of HR Audit

Why HR audit?

a. To ensure the effective utilization of existing human resources of the organization;
b. To review compliance with a numerous administrative regulation;
c. To install the sense of confidence in management and HR function;
d. To increase the reputation of both the organization and department in the community;
e. To perform “Due Diligence” review for shareholders or potential investors.

2.17.2 Objectives of HR Audit

a. To review the performance of the HR department and relative activities to access the effectiveness on the implementation of various policies to realize the organization goals;
b. To identify the gaps, lapses, shortcomings in the implementation of the policies procedures, practices and to suggest remedial action;
c. To know the factors which are detrimental;
d. To suggest measures and corrective steps to rectify the mistakes if any;
e. To assess the employees, staff and workers with reference to the performance appraisal reports and suggest suitable recommendation for improving efficiency of the employees.

2.18 Performance Appraisal

Armstrong (2006) defines performance appraisal as the proper assessment and evaluation of persons by their superiors usually, at yearly review meeting.

Performance appraisal is not just about rating employees. Organisations carry out performance appraisal as a basis for administrative decisions such as promotion, allocation of financial rewards, employee development and identification of training needs. ‘Appraisal is preceded by establishing general objectives or a description for the job, identifying specific job expectations, providing feedback and, when necessary, coaching.
Performance appraisal is a well organized evaluation process of an individual with respect to his or her performance on the job and his future potential for improvement (Dale, 1980). Evaluation of performance is inherent capability of a person or evaluation of work assigned. The evaluation of performance of a person can be done through observation in respect to time. Another thing is how the work is done by the person with respect to quality of work. Evaluation is present performance and potential performance of the employee in future, where present performance is the performance of an employee in present time and potential performance is the expected performance of the employee in future. Potential performance is really difficult because the future is uncertain. The performance evaluation has to carry both for a proper appraisal of an employee.

According to Flippo (1976), performance appraisal is the systematic, periodic and impartial rating of an employee’s excellence in matters pertaining to his present job and his potential for better job. Appraisal of an employee should be on regular basis with a proper time interval and it should be based on merit / performance. Evaluation of job can be possible only if the organization sets yardsticks/ targets, which is objective judgement. In the evaluation process, one cannot eliminate subjective judgements because the jobs are not hundred percent measureable.

Human resource planning depends on the type of appraisal used. Companies may determine the appraisal type based on the mission, values, job accountability and proper criteria to measure and access performance. For example, if the company is using productivity tied to measurable results, the criteria needs to be specific and clearly communicated to employees and supervisors. Measurements may include completion time of the job assigned, required number of items packed, number of calls to customers per hour, or production in day/month or yearly basis. Benchmarking and performance measurement are closely linked. Performance measurement can be the first step toward improving the performance of public sector organizations.

Human resource management is holistic; everything is interconnected with each other. Performance appraisal has direct linkage with such personnel systems as selection career planning and training etc. Performance appraisal and employee selection has a lot to perform with the criterion or job expectation. Therefore there is a necessity of highly developed job descriptions for not only to select or hire best employees but also to evaluate
them on same criteria. Similarly there is a strong linkage between induction, training, appraisal and reward.

An effective appraisal system is an asset to the organization. Pareek and Rao (1981), Klingner et al. (1998), Beard Well et al. (2001), and Pandey (1998 and 2002) view the objectives of performance appraisal differently. According to them, appraisal should serve the following objectives.

- Helps the employee to overcome his weaknesses and improve his strengths and thus enable him to improve his performance;
- Generates adequate feedback and guidance from the immediate superior to an employee working under him;
- Contributes to the growth and development of an employee through helping him in realistic goal setting;
- Provides inputs to system of rewards (comprising salary increments, appreciation, additional responsibility, promotion, etc.) and salary administration;
- Helps in creating a desirable culture and tradition in the organization;
- Helps identify employees for the purpose of motivating, training and development;
- Generates significant, relevant, free and valid information about employees.

2.18.1 Who is appraised?

The coverage of appraisal varies from organization to organization. Generally, in most organizations, appraisal takes into account everyone from senior manager to the first level supervisors, clerical and secretarial staff, i. e.; all employees. In some organizations, appraisal reports are made on all staff except senior most staff, while in other; appraisal covers some managerial staff (Pandey, 2002). Steward and Steward (1978) assert that in some organizations, only managers are appraised, while some appraise employees of certain grade only and others appraise all the people working with them.

2.18.2 Who is the appraiser?

Supervisors and managers traditionally are the appraisers of their subordinates. Since supervisors are closer to the subordinates, they are in a better position to perform this function (Schuler & Huber, 1990 and Torrington & Hall, 1995). Hence, the immediate
supervisor, generally, completes the appraisal. Appraisal is usually subject to some kind of revision by the supervisor’s boss or the ‘reviewing officer’ who looks the report, aids his/her signature and any comment she/he thinks necessary. In some organizations, the higher level of management (by personnel, by some appraisal committee or combination of these) reviews the report assessed by the supervisor.

2.19 Training and Development

The official and ongoing educational activities within an organization designed to enhance the fulfilment of performance of employees. Training and development programmes offered by business might include a variety of educational techniques and programmes that can be attended on a compulsory or voluntary basis by staff. Training is the process of planned programmes and procedures undertaken for the improvement of employee’s performance in terms of attitude, skills, knowledge and behaviour. These training and development programmes can significantly improve the overall performance of organization. When training applied to executive or senior level it is termed as management development programme (MDP) /executive development programme. Training is concerned with increasing the knowledge and skills of employees or doing specific jobs and development involves the growth of employees in all respects. Whereas training increases job skills, development shapes attitudes of employees. Training is a planned activity for improving the technical skills of the employees to enable them to do particular job efficiently. In other words, training provides the workers with facility to gain technical knowledge to learn new skills to do specific job. Training is equally important for the existing as well as new employees. It enables fresher to get familiar with their job assigned and also improve the job related knowledge and skills. Training is one of the most important activities of the management. The technological developments are taking place at much faster rate. Individual needs training to match him with the requirements of new changes. After recruitment and selection, the next step is training, which is required for all types of jobs in the organization. New jobs require some sort of special training. Training is also valuable for employee and the organization. It helps to reduce the cost. Training is thus no more a luxury but now it is considered as a necessity.
Training implies systematic procedure whereby employees are imparted technical knowledge and skill for specific jobs. It emphasizes improvements of the employees to handle specific jobs and operations more effectively.

- According to Jucius (1975), “The term training is used to indicate only process by which the aptitudes, skill and abilities of employees to perform specific jobs are increased.”

- According to Dale. S. Beach (1991), “Training is the organized procedure in which people learn knowledge and skill for definite purpose.”

- According to Edwin Flippo (1976), “Training is the act of increasing the skills of employees for doing a particular job”.

Therefore training is known as a process of improving the knowledge, skill and talent of an employee for doing the assigned job. The total process of learning involves knowledge gain, sharpen of skills, thoughts, regulations, or changing of approaches and behaviours to develop the performance of individuals. Training is the achievement of knowledge, skills, and abilities (KSA) through professional improvement.

### 2.20 Career Planning

Effective human resource management covers proper career planning, successful career development programmes and succession planning. An organization is expected to face highest turnover rate which results in much harm to their plans and programmes without career planning and career development activities. Correspondingly an organization is likely to encounter difficulties in higher level without introducing succession planning. Succession planning is a process to manage vacancies in higher level in an organization. HR activities like selection, training and assessing of employees deliver two basic roles in organization. First, fundamental and usual role is to fill its vacancies with employees depending upon the requirements, interest of the applicant, skills, and ability. However, these actions are taking towards the second role of ensuring that the interests of the employees are protected for a long period of time by the organization. So that, the employee will be optimistic to develop and recognize his or her full potential.
Career planning generally involves getting to know about self study i.e who you are and what you want and how to get there. Career planning is an uninterrupted process that permits an employee in an organization to move from one stage to another as the time changes.

2.20.1 Normal Periods in Careers

Career management is a practice by which an employee can steer, direct and influence the path of his/her career. In the path of career, employees shift from one juncture to another by executing proper goals at each juncture.

Career may be analysed based on three main stages. It includes early career concerns, mid career concerns, career ending concerns.

2.20.2 Early Career Concerns

Early career concern is the stage of career where one makes the transition from college to identify his interest to work by exploring several jobs. This stage has the smallest amount of significance as it takes place prior to the employment.

2.20.3 Mid Career Concerns

This stage of career is marked as the advancing of career by giving more contribution, integrity, values towards the organization. It is also marked as the continuous improvement of performance or the start in deterioration in performance, advancing in career may limit options, growth and performance of the employee. The major challenge of the career at this stage is to create the remaining career productive on job. Some employees are technically skilled and competent to achieve their targets and goals in an early stage and step to higher stages are no longer as motivated than to other climbers.

2.20.4 Career Ending Concerns

At this stage of career the employee rests on his achievements and gets respect from sub-ordinates, the employee is no longer learning about his or her profession. He will work as a guide for the younger employees as his advices and opinions are valued and important for the organization. The employee at this stage also plans for his retirement.
2.20.5 Career Planning vs. Human Resource Planning

Human resource planning (HRP) is the practice of examining and assessing the requirement for and availability of workforce. Through human resource planning, the HR department is able to make a summary of abilities, skills and potentials available inside the organization, where as career planning helps in finding the skilled and competent employees who could be prepared for next higher level positions, on the basis of their performance.

Human resource planning presents clear picture about the availability of human resources for extension, expansion and growth etc. On the other hand, career planning only provides information about the employee, who could succeed in case of major developments like superannuation, death and attrition of employees due to various reasons. Human resource planning is attached to the overall strategic planning of the organization. As career planning is an important activity of human resource planning, without proper career planning human resource planning will not be effective one.

2.20.6 Need for Career Planning

Career planning is necessary for the following reasons:
   i. To attract employees and maintain talents by offering them career opportunities, not jobs;
   ii. To utilize white-collar reserves efficiently to achieve increased productivity inside the organization;
   iii. To reduce dissatisfaction between employees and turnover rate;
   iv. To improve the motivation and morale of the employee;
   v. To face the current and future challenges through the existing human resources by developing them on a timely basis;
   vi. To provide suitable promotional opportunities.

2.20.7 Process of Career Planning and Development

The following steps are involved in career planning process.
   i. Recognizing individual requirements and aspirations;
   ii. Analyzing career opportunities (within and outside the organization);
iii. Aligning needs and opportunities;
iv. Establishing realistic goals (both short term and long term);
v. Action plans and periodic reviews.

2.21 Succession Planning

Succession planning is a process by which an organization takes conscious decision to encourage and promote the continuous development of workers and make sure that key positions are maintained and enabling an organization to accomplish business aims and objectives. Usually, succession planning has taken as a replacement approach, often focusing on management-level positions. One or two successors might be recognized and selected, probably based on the appraisal report of immediate supervisor, and then placed in a senior position (Armstrong, 2006; Rao, 2010). According to PSSN (2008) however, succession planning has developed into a process that can be used to:

1. Filling an organization’s human resources at a broad or particular level;
2. Finding, assessing and developing employee’s knowledge, talent, ability and skills to meet the current and future human resource needs;
3. Ensure a uninterrupted supply of aptitude by helping employees to increase their potential for future.

Although similar to substitution planning and the utilization of replacement charts, succession planning likely to be directed toward a bigger-range time horizon and is added focused on growth and improvement (Greer, 2001; PSSN, 2008). It is also more concerned with the development of pools of potential replacements, as opposed to individuals (Byars and Rue, 2000). Succession planning involves more elaborate planning for skill development of potential replacements, is more systematic in the assessment of potential replacements and their developmental needs, and generally applies to higher levels of managerial positions (PSSN, 2008). In some companies, succession planning also incorporates developmental planning for high-potential managers while they are still in lower-level positions (Greer, 2001; PSSN, 2008). This is especially prevalent for minorities and women who are likely to become long-range successors. Additionally, succession planning also may be concerned with the future requirements of executive positions since the necessary personal skills and characteristics may differ substantially from current
requirements. Given the growing interdependencies across functional areas in many companies, one promising approach for developing potential successors for positions of the future may be to assign them leadership responsibilities in cross-functional teams (Byars and Rue, 2000). Succession planning (Torrington et al., 2005) has a very high profile at present. This has developed from the original process of replacement planning which tended to be an informal approach to promotion with a short-term focus on who would be able to replace senior people if they leave suddenly, so that disruption and dislocation is minimised (Huang, 2001). In the 1980s, more formal approaches were used which included careful analysis of the jobs to be filled, a longer-term focus, developmental plans for individuals who were identified as successors, and the possibility of cross functional moves (Torrington et al., 2005). This approach was typically applied to those identified as having high potential, and was generally centred on the most senior positions (Greer, 2001). Larger organisations would produce tables of key jobs on which were named immediate successors, probable longer-term successors and potential longer-term successors; all with attached development plans (Torrington et al., 2005; Armstrong, 2006; Greer, 2001; PSSN, 2008). Alternatively, high-potential individuals were identified with likely immediate moves, probable longer-term moves and possible longer-term moves. However, as Hirsh (2000) points out, this model is appropriate to a stable environment and career structure, and the emphasis in current succession planning has changed yet again. Strategic HR management philosophies and practices may yield HR strategy of institutions. The HR strategy would be changed into HR planning. Models of HR planning and forecasting techniques are fundamental tools to yield value adding HR. What are important here are all activities and practices that demand enabling factors that lay foundation for smooth functioning of these activities. These factors realize a proper play ground for HR unit to strategize its HR functions.

2.22 Gap Analysis

- There is no literature available assessing the HRP in steel industry at Kalinga Nagar Industrial Complex, Jajpur.
- No research work has been conducted on HRP in Kalinga Nagar Industrial Complex.
Another gap identified was the absence of such study i.e comparison of HRP in two industries (Public Sector and Private) neither in literature nor in any organization at Kalinga Nagar Industrial Complex.

The dependent and independent variables which are used in the study for data analysis are never used in this type of study.

2.23 Conceptual Model

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Chapter -2

Theoretical Review


