## HUMAN RESOURCE PLANNING

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#### Abstract

Human Resource Planning is also sometimes called manpower planning. It is a process for determining and assuring that the organization will have an adequate number of qualified persons, available at the proper times, performing jobs which meet the needs of the enterprise and which provide satisfaction for the individuals involved. Human resource planning is not static but ongoing. It involves many interrelated activities. The plan must be modified and updated as conditions require. It includes the planning and development of human resource programme, such as recruitment, performance appraisal and training to assure that people's needs of the organization are met.


Key Words: manpower planning, adequate, enterprise, recruitment, performance appraisal.

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## Introduction

Stone R.J. (1998) defines human resources planning (HRP) as a way of ensuring that a predetermined number of employees with the correct skills are available at a specified time in future. Beach D. (1980) describes human resource planning as a process for determining and assuring that the organization has an adequate number of qualified persons, available at the proper times, performing jobs which meet the needs of the enterprise and which provide satisfaction for the individuals involved. Armstrong M. (1996) sees human resource planning as the systematic and continuing process of analyzing an organisation's human resource needs under changing conditions and developing personnel policies appropriate to the longer-term strategic effectiveness of the organization. It is an integral part of corporate planning and of the organization. It is an integral part of corporate planning and budgeting procedures since human resource costs and forecasts both affect and are affected by longer-term corporate plans.

All the definitions above emphasise that human resource planning ensures that the organization has, at all time, the right number of qualified manpower for the achievement of its objectives and the satisfaction of the employees' needs.

## Background to the study

Planning for human resources should be tied in with overall enterprise long - range planning. Unfortunately, many enterprises do not do formal long - range or strategic planning (Beack, 1980). For many organizations, the creation and adoption of an annual budget constitutes the sole mechanism of planning for organisation's needs. Of course, if top management does not undertake strategic business planning and wishes to only go as far as the annual budget-planning process, the personnel director can develop limited manpower plans and programmes geared to the one-year cycle. He can also campaign for more comprehensive and longer-range planning as a means for strengthening the organisation.

Armstrong (1992) says that many companies carry out systematic planning only for those categories of personnel who have been in short supply or for those types of skills which require a long development time within the organisation. Basically both of these conditions generally
apply to highly skilled and technical personnel and to managers. All organisations that conduct extensive yearly recruiting at the colleges and universities must carefully plan their needs and their utilization of management trainees, accountants, engineers, scientists and sales personnel. Likewise, companies that employ large numbers of craftsmen must carefully plan the input to their apprentice-training programme as well as the placement of the graduates.

Because unskilled and semiskilled hourly paid personnel and routine clerical personnel are often abundantly available in most labour markets, many firms only plan for short-term needs regarding these types of employees. However, such an informal approach may not be advisable even for these kinds of workers because some of these may eventually be upgraded to better jobs. A careful planning of needs, qualifications, utilization, training needs and career paths would be worth-wile.

## Human Resource Forecast

Armstrong (1992) says that human resource forecast is a determination of the demand for people and of the appropriate types and skills for given periods in the future such as one, three and five years hence. The forecast also requires the preparation of an estimate of the supply of people who will be available for the selected periods. The supply is composed of two parts. The first part is an estimate of the numbers and types of employees presently on the payroll who still will be available by the ends of the chosen periods. The second part of the supply is that portion which must be recruited externally. These figures for the planning periods are obtained by subtracting the internally available manpower from the projected demand. If the figures are positive, people will have to be hired, if negative, people may eventually have to be laid off.

The demand forecast is derived from the information generated in step one-goals and plans of the organisation of the human resource planning process described earlier. This step should provide the human resource planners with data on such factors as projected dollar - volume of sales, limits to be produced, number of clients to be serviced, new facilities to be constructed, new functional departments to be created and so on. Generally, manpower planners must use a variety of techniques to project future personnel needs. The techniques available range from judgement to rather sophisticated quantitative models. The four major categories of forecasting
techniques are judgment and experience, budgetary planning, work standards data and key predictive factors.

## a. Judgment and Experience

This category includes estimates made by people who are very familiar with the products, process and jobs in the business. It is appropriate for relatively short-run forecasts of up to two years. Supervisors and managers of the various units of the business make estimates of future manpower needs by judgementally converting information on short-term future business activity into numbers and types of people needed. Rules of thumb and decision rules are also subset of this category. The Delphi technique is a systematic way of obtaining and refining judgements by a group of experts. It was originally developed by the Rand Corporation as a way of doing technological forecasting but it can be applied to manpower planning and forecasting as well. A panel of persons very familiar with the problem at hand is formed. The experts work privately and not in an assembled group. This is to avoid concurrence and conformity induced by face-toface peer group social pressure. Each expert is asked to make predictions of future events. A moderator or intermediary collects the predictions, summarise them and then distributes them to the panel members for another round of forecasts. Eventually, convergence of opinion takes place and an acceptable forecast is obtained.

## b. Budgetary Planning

Beach (1980) states that most organisations, other than the very small single proprietorship, prepare annual budgets. A budget is a plan expressed in financial and numerical terms. It is both an instrument for planning and for managerial control. Most budgetary planning is done on an annual basis. Often the budget for the whole organisation is built up from the individual departmental budgets. After the tentative departmental budgets are prepared they must be combined and adjusted by upper-level management to properly allocate resources among all units and to bring income and expenditure into balance. For many companies, the annual process of budget preparation and review constitutes the only formal planning that is done. In this case it can become the principle vehicle for planning of manpower needs. Individual departmental managers translate activity levels and projects into rather detailed needs for
personnel, materials, expenses, equipment and facilities. In creating the budget, the managers itemize the various categories of personnel in detail and in aggregate. The process forces them to think through their plans and needs for the year and to justify these plans and needs to higher management.

## c. Work Standard data

Mahey, Salaman and Storey (1998) say that by means of industrial engineering work measurement techniques, many companies have established comprehensive sets of data for manhours or unit-times to perform many tasks. These standards are most prevalent for direct production tasks but some companies have also prepared work standards for maintenance and clerical activities. The forecast procedure involves the translation of overall enterprise volume of activity into production schedules for all production departments. The projected units of output for each department are converted into man-hours, man-days and number of employees by applying the established time standards.

The measured work standards technique generally cannot be used for determining professional, administrative and executive personnel needs. Judgement, past experience and managerial intent are the major determinants of how many and what kinds of personnel are needed.

## d. Key Predictive Factors

The essence of the key predictive factors technique is to find one (or a very limited number) of business factors or key indicators with which total manpower correlates highly. To identify such a factor, the human resource planning office must examine several business factors such as dollar sales volume, units produced or number of clients served to find which factor or factors yield a good historical correlation between number of employees and changes in the business factor. A considerable amount of quantitative analysis may be necessary to determine the relationship between changes in the various business indicators and changes in manpower. In some kinds of business, the total number of employees is not directly proportional to product volume. For example, in a continuous process industry such as an oil refinery, it might require almost as many people to run a plant at $80 \%$ of capacity as at full capacity. Another consideration is that many enterprises make a variety of products or services. Some of these may be quite labour intensive and others may not be. Therefore, the manpower analysis must be conducted
separately for each of the product divisions. Charts and formulae can be created to show the aggregate figures for the company.

Statistical and operations research techniques constitute useful analytic tools for making manpower forecasts. Armstrong (1992) says only in the last few years have organisations begun systematically to apply these techniques for human resource planning. Among the quantitative techniques available for use in this application are statistical correlation (linear, curvilinear, multiple regression), stochastic analysis - intercorporating probabilities, linear programming, network flow methods and computer simulation. While the planning group is making these projections, it also must make supply analysis. First, it must determine the personnel presently available within the organisation. The planning group must also forecast the probable losses from the current roster due to retirements, resignations, discharges, deaths and disabilities.

## Aims of human resource planning

According to Stredwick J. (2005) human resource planning aims at ensuring that the organization:

- obtains and retains the quantity and quality of people it needs;
- makes the best use of its human resources;
- is able to anticipate the problems of potential surpluses or deficits of people;
- can develop a well-trained and flexible workforce, thus contributing to the organization's ability to adapt to an uncertain and changing environment; and
- reduces its dependence on external recruitment when key skills are in short supply - this means formulating retention as well as human resource development strategies.


## Planning Activities

Once the HR manager has estimated the HR needs of the organization, the next challenge is to fill the projected vacancies. Present employees who can be promoted, transferred, demoted or developed make up the internal supply. The external supply consists of people who do not currently work for the organization.

Techniques for forecasting the internal supply of personnel includelabour-turnover analysis, skill inventories, replacement charts and Markov analysis, and these are analysed hereunder:

## a. Labour Turnover Analysis

To accurately forecast the demand for labour, human resource (HR) manager must know how many people will leave the organization. Labour turnover in an organization may result from employee retirement, death or disability, resignation, retrenchment or termination. A detailed analysis of why people leave the organization is essential. Labour turnover rates from past years are the best sources of this information for most organisations. Turnover for each job classification and department should also be calculated.

## b. Skills inventory

It is another method used to evaluate the internal supply of labour. The basic information of all employees within the organization permits the HR manager to:

- identify qualified employees for different jobs;
- determine which skills are present or lacking in the organization; and
- assess long-term recruitment, selection and training and development requirements.

Information that can be listed in a skills inventory includes:

- personal data-age, sex, marital status;
- job specification - education, training and job experience; and
- skills - language, computer programmes etc.

Skills inventory should provide an accurate means of evaluating the available skills within an organization. Information from skills inventory, provides a means for filling positions by internal promotion, ensuring that existing employees are not overlooked. That act, motivates employees for they feel that the organization is recognizing them. Skills inventory does satisfy the organisation's HR objectives and employee needs.

## c. Replacement chart

This is used for technical, professional and managerial employee to provide information on name, age, present position, performance rating, experience and indication of promotion potential. This technique summarises the information in visual form for managers so that they easily identify both the present incumbents and potential replacement for the given positions. With continual updating, replacement charts give both the HR manager and line managers a visual view of the organisation's human resources.

## d. Markov Technique

It is a mathematical technique used to forecast the availability of internal job candidates. A matrix is developed to show the probability of an employee moving from one job to another. The underlying assumption is that the movement of personnel among various job classifications can be predicted from past movements. This technique is used mostly by large organisations.

## e. Succession Planning

It is concerned with the filling of management vacancies. It stresses the development of high potential employees and takes a long-term view of the organisation's HR needs. Effective succession planning requires a systematic developmental needs, identifying appropriate learning experience via job assignments, special projects and formal training programme. The HR manager's role is to ensure that the succession planning provides the organisation's future managers with the necessary preparation to successfully fill in potential vacancies. This means having an effective performance appraisal system, needs-oriented training and development programmes and a corporate culture which fosters individual growth and promotion from within.

## Research Methodology

A survey by the Conference Board was undertaken and revealed that $37 \%$ of responding firms used skills inventories for lower-level exempt (supervisory and professional) personnel, 33\% used inventories for office and clerical personnel and used them for production or operations personnel. See Table 6.1.

## Table 6-1. Usage of Skills Inventories

| Practice | Production or Operations |  | Office and Clerical |  | lower level | evel <br> Exempt |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | \% | No. | \% | No. | \% |
| Total Respondents | 335 | 100 | 523 | 100 | 523 | 100 |
| Respondents maintain skills inventories | 64 | 19 | 173 | 33 | 191 | 37 |
| For respondents maintain skills |  |  |  |  |  |  |
| Inventories | 64 | 100 | 173 | 100 | 191 | 100 |
| Data included |  |  |  |  |  |  |
| Education and training |  | 45 |  | 61 |  | 63 |
| Work history |  | 44 |  | 57 |  | 63 |
| Specific work skills |  | 42 |  | 54 |  | 57 |
| Language proficiency |  | 23 |  | 30 |  | 34 |
| Avocation and hobbies |  | 20 |  | 23 |  | 24 |
| Test results |  | 20 |  | 28 |  | 25 |
| other ${ }^{2}$ |  | 8 |  | 6 |  | 8 |
| When inventory information is |  |  |  |  |  |  |
| gathered or amended at hirin |  | 42 |  | 50 |  | 50 |
| At job change or promotion |  | 25 |  | 30 |  | 32 |
| Annually |  | 14 |  | 22 |  | 26 |
| At request of employee |  | 30 |  | 35 |  | 36 |
| Other |  | 13 |  | 10 |  | 9 |
| Skills inventory used as a search |  |  |  |  |  |  |
| tool in filling job openings | 31 |  | 47 |  | 55 |  |

Source: Reprinted by permission from Harriet Gorlin, Personnel Practices I: Recruitment, Placement, Training, Communication (New York: The Conference Board, 1981)

Beach D.S.C. (1980) says that the skills inventory has several important uses. When the human resource forecast is prepared later, one can compare the number, types and skills specified by the forecast with present baseline or current position given by the skills inventory to ascertain what skills must be developed from present personnel via training, upgrading and special development efforts or obtained from external manpower sources.

Another important use of skills inventory is to find or identify talent within the organization for specific job openings. For example, which employees within the company meet the following job specification: masters degree in mechanical engineering, at least six years of responsible professional experience in internal combustion engine design, at least five years engineering supervisory experience etc.

## Organization's Corrective Action

The retention plan is based on an analysis of why people leave the organization. Exit interviews may provide some information but they are unreliable because people rarely give full reasons why they are leaving. The retention plan should address each of the areas in which lack of commitment and dissatisfaction can arise. The actions to be addressed are listed below:

## Adequate Compensation/pay

Problems may arise because of uncompetitive, inequitable or unfair pay structure. The impetus to work is to earn a living. It is fundamental therefore, that the quality of working life is affected by how well this aim is achieved. The determinants of adequate compensation/pay are that:

- the income from full-time work should meet socially determined standards of sufficiency or the subjective standard of the recipient;
- the pay received for certain work should bear an appropriate relationship to the pay received for other work.

Possible actions to address the pay problems include:

- reviewing pay levels on the basis of market surveys;
- improving an existing scheme to provide for equitable grading decisions; and
- ensuring that employees understand the link between performance and reward.


## Conclusion

Just as general strategic planning, Beach D.S. (1980) states that financial planning and market planning are concomitants of the successful business organization and so too is formal human resource planning and development. Some firms drift along for several years without paying adequate attention to human resource programmes but, long-term organizational success cannot be achieved without a reasonable effort toward manpower planning and development.

Effective personnel management is not the handling of a polpourri of various personnel functions such as hiring, training, compensation and benefits. It is rather, an integrated whole that is designed to enhance both organizational objectives and individual employee satisfactions. Sound human resource planning is a basic instrument for achieving this holistic view of personnel.

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