Human resource planning

Human resource planning is the business process for ensuring that an organisation has suitable access to talent to ensure future business success. Human Resource planning is the process by which a management determines how an organisation should move from its current manpower position to its desired manpower position. Through planning a management strives to have the right number and the right kinds of people at the right places, at the right time and to do things which will result in receiving the long range benefit for both the organisation and the individual. All other activities of HR like hiring, training, remuneration and labour relations are derived from Human resource planning (HRP). Human resource planning is also called manpower planning.

Human Resource Planning Process

Environment scanning

This helps HR planners identify and anticipate sources of problems, threats and opportunities that should drive the organization's strategic planning. Both external (competitors, labour markets, legal environment) and internal (strategy, technology, culture) environmental scanning is necessary for effective HR planning.

For example: Amazon closed a large and costly customer service centre in Seattle despite good growth projections as their study and research said that they could meet their growth projections with a far less costly customer centre in India.

3.2. Labour demand forecast

It projects how business needs will affect HR needs using qualitative methods (e.g. Delphi, nominal) and quantitative methods (trend analysis, simple and multiple regression analysis).

The labour shortages are preventing entrepreneurs from expanding their businesses and such shortages makes the planning more difficult.

3.2.1. Qualitative Methods

In these methods, the Delphi technique is very popular. The experts go through various rounds of forecast estimates but no face to face meeting of the experts takes place as an intermediary is involved. Experts take turns at presenting a forecast statement and assumptions. The intermediary passes on the forecasts and assumptions to others.Revisions are then made independently and anonymously by the experts. The intermediary then pools and summarizes the judgments and gives them to the experts.This process continues till a final conclusion on the forecast is reached.

Another technique of the same type is the nominal group technique in which experts discuss and share their ideas and list them in writing. The experts then share their ideas with the group

in turn. As the ideas are presented, a master list of the ideas is compiled so that everyone can refer back to them. The ideas are discussed and ranked by membervotes. In this method, no intermediary is involved so a face to face discussion is held amongst the experts. Both these techniques are of subjective type and time consuming.

3.2.2. Quantitative Methods

These techniques are based on the assumptions that the future is an extrapolation from the past. Trend analysis is one the techniques which incorporates certain business factors (units produced, revenues) and a productivity ratio (employees per unit produced).

Following six steps are important to trend analysis.

Find the appropriate business factor that relates to the size of the workforce.

Plot the historical record of that factor in relation to the size of the workforce.

Compute the productivity ratio (average output per worker per year).

Determine the trend.

Make necessary adjustments in the trend past and future.

Project to the target year.

The use of appropriate business factor is critical to the success of trend analysis.

3.3. Labour supply forecast

Whereas the labour demand forecast projects HR needs, the labour supply forecast projects resource availability. Through this forecast one can come to know the firms current and projected competencies. Supply forecasts are typically broken down into two categories:

external supply and

internal supply.

3.3.1. Internal supply

Internal labour supply consists of those individuals and jobs currently available within the firm. Information on personnel is maintained in Human Resource Information System (HRIS). Data from this system are used to make projections into the future based on the current trends.

3.3.2. External supply

External supply consists of those individuals in the labour force who are potential recruits of the firm. The whole country or even the world may be the relevant labour market for highly skilled jobs whereas for unskilled jobs the labour market is the local community.

3.4. Gap analysis

Gap analysis is used to merge the forecasts of labour demand and supply. This process identifies the potential shortages or surplus of skills, employees and competencies. In addition to this, the HR planners can analyse the environmental forecasts with supply and demand forecasts for evaluating the firm's preparation in pursuing the different business scenarios in the context of business objectives.

3.5. Action Programming

It is the final step of HR Planning. It takes the adopted solution and lays down the sequence of events that need to be executed to realize the plan. The purpose of this step is to make certain that the decisions taken in the previous four steps are brought into action.

3.6. Control and Evaluation

Control and evaluation monitor the effectiveness of human resource plans over times.

Deviations from the plans are identified and actions are taken. The extent to which human resource objectives have been attained is measured by the feedback from various outcomes.Factors affecting Human Resource Planning

4.1. Type and strategy of organization

It determines the production process involved and the number and type of staff needed. In addition, the strategic plan of the organisation defines its HR needs. Manufacturing organizations are more complex than the service organizations.

For example, a strategy of organic growth means that additional employees must be hired. Aquisitions and mergers mean that the organisation will plan for the layoff since mergers create duplicate positions that can be handled more efficiently with fewer employees.

4.2. Organisational growth cycle and planning

Need for planning is felt when an organisation enters the growth stage. Mature organisation experiences less flexibility and variability. At this stage retirement and retrenchment are focused upon and growth slows down. Finally in the declining stage, planning is also done for layoffs and retrenchment.

4.3. Outsourcing

Several organizations outsource part of their work to outside parties in case sufficient labour is not available. Out sourcing of noncritical activities through subcontracting determines HR Planning.

4.4. Environmental uncertainties

HR managers work in a very unstable and unpredictable environment. Flexi-timing, job sharing, layoffs, retirement are some of the programs carried out by organizations for facing the uncertainties.

4.5. Nature of jobs being filled

HR planners must consider the nature of jobs being filled. It is easy to recruit shop floor workers but for hiring at higher positions a great deal of efforts and sourcing is required.

4.6. Type and quality of forecasting information

The information used to forecast personnel needs originates from many sources. A population census is the primary source of information for any manpower planning. It gives the total count of the country's population along with valuable statistics on the personal and economic characteristics of the present, thus enabling future projections. Other sources are job analysis, labour force sample surveys, establishment surveys, household surveys, industrial and agricultural surveys, labour market surveys, national economic development and educational plans.

4.7. Time horizons

Companies operating in unstable environment (For example, in computers and software industry), planning must be for a shorter period. Whereas for organizations where environment is stable (For example, universities and colleges), planning is done for a longer duration.

Significance of Human Resource Planning

Human resource planning aims at fulfilling the objectives of manpower requirement. It helps to mobilize the recruited resources for the productive activities. The human resource planning is an important process aiming to link business strategy and its operation.

5.1. Future Manpower Needs

Human resource planning ensures that people are available to provide the continued smooth operation of an organization. It means, human resource planning is regarded as a tool to assure the future availability of manpower to carry on the organizational activities. It determines the future needs of manpower in terms of number and kind.

5.2. Coping With Change

Human resource planning is important to cope with the change associated with the external environmental factors. It helps assess the current human resources through HR inventory and adapts it to changing technological, political, socio-cultural, and economic forces.Recruitment of Talented Personnel. Another purpose of HR planning is to hire and select the most capable personnel to fill job vacancies. It determines human resource needs, assesses the available HR inventory level and finally recruits the personnel needed to perform the job.

5.4. Development of Human Resources

Human resource planning identifies the skill requirements for various levels of jobs. Then it organizes various training and development campaigns to impart the required skill and ability in employees to perform the task efficiently and effectively.

5.5. Proper Utilization of Human Resources

Human resource planning measures that the organization acquires and utilizes the manpower effectively to achieve objectives. Human resource planning helps in assessing and recruiting skilled human resource. It focuses on the optimum utilization of human resource to minimize the overall cost of production.

5.6. Uncertainty Reduction

This is associated with reducing the impact of uncertainty which are brought by unforeseen changes in processes and procedures of human resource management in the organization.

5.7. Other potential benefits

Upper management has a better view of the HR dimensions of business decisions.

Personal costs may be less because the management can anticipate imbalances before they become unmanageable and expensive.

More time is provided to locate talent.

Major and successful demands on labour markets can be made.

Requisites for successful Human Resource Planning

HR Planning must be recognized as an integral part of corporate planning. The planner must be aware of the corporate objectives.

The support of top management is very essential

HR Planning responsibilities should be centralized so that coordination is there between different management levels.

All the records of HR department must be complete, updated and readily available.

The time horizon of the plan must be long enough to allow for any solution.

Data collection, analysis, techniques of planning and the plans themselves need to be constantly revised and improved in the light of experience.

Job analysis

Job analysis is a systematic process of collecting the information on nature of a job, qualities and qualifications required to a job, physical and mental capabilities to required to a job, duties and responsibilities, physical and mental effort required to perform a job, necessary skills required to perform a job, working conditions and environment for a job, in order to describe job description and job specification, for recruitment and selection of employee, improve job satisfaction, employee safety and to build up employee motivation etc.

Job analysis, contains a simple term called "analysis", which means detailed study or examination of something (job) in order to understand more about it (job). therefore job analysis is to understand more about a specific job in order to optimise it. Job analysis is a systematic process of collecting complete information pertaining to a job. Job analysis is done by job analyst who is an officer have been trained for it.
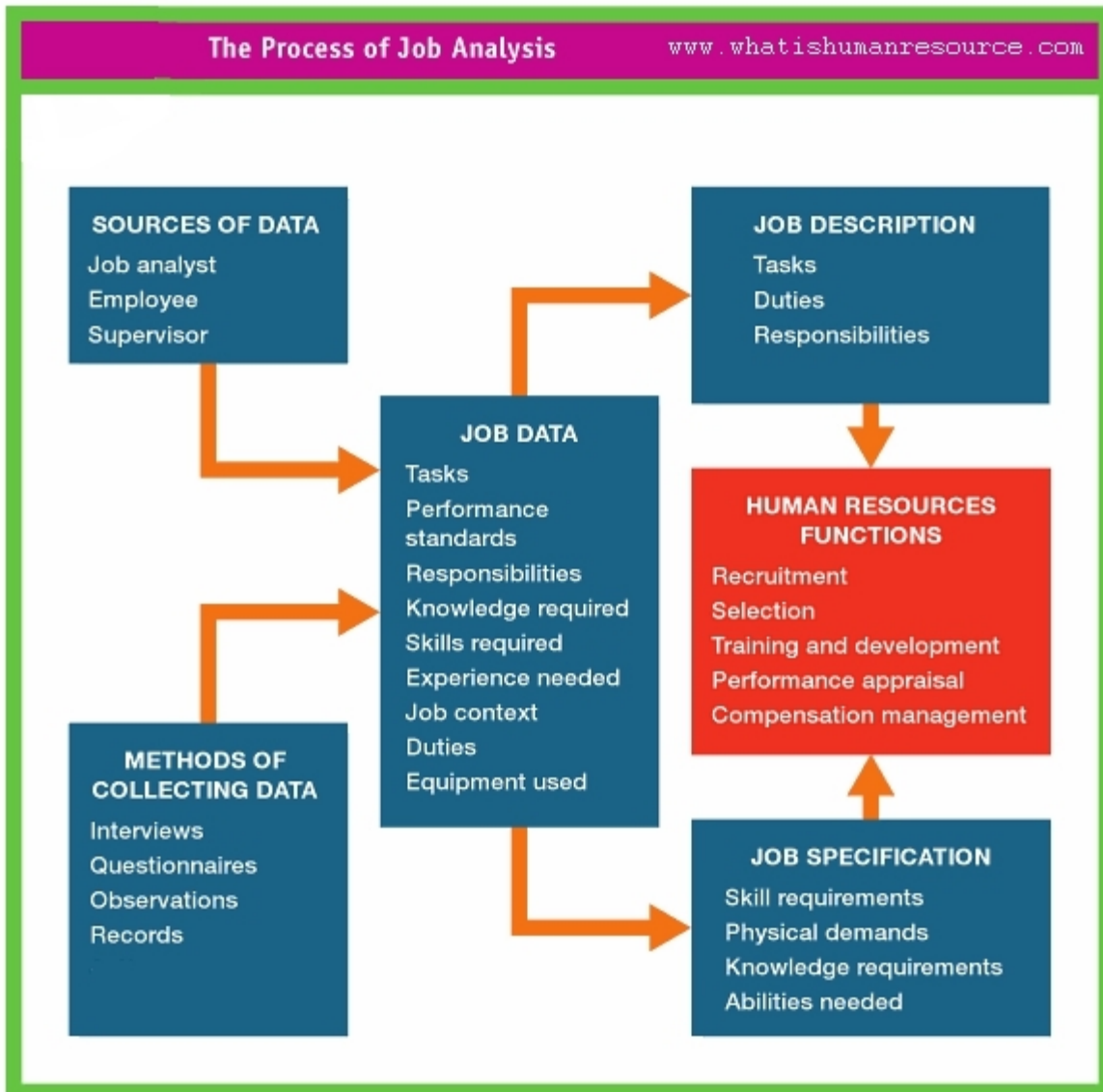
Job analysis is a procedure through which you determine the duties and responsibilities, nature of the jobs and finally to decide qualifications, skills and knowledge to be required for an employee to perform particular job. Job analysis helps to understand what tasks are important and how they are carried on. Job analysis forms basis for later HR activities such as developing effective training program, selection of employees, setting up of performance standards and assessment of employees (performance appraisal)and employee remuneration system or compensation   plan.

Job analysis and competitive advantage

Job analysis has its impact on all functions of HRM. Job analysis, if properly done, will enhance the effectiveness of all HR activities. Specifically, job analysis benefits an organization in the following ways:
1. Laying the foundation for human resource planning.
2. Laying the foundation for employee hiring
3. Laying the foundation for training and development,
4. Laying the foundation for performance appraisal
5. Laying the foundation for salary and wage fixation
6. Laying the foundation for safety and wealth.
Management therefore should perform all these HR activities. It may help job analyst to complete the task successfully.

The Process of Job Analysis — www.whatishumanresource.com

SOURCES OF DATA
Job analyst
Employee
Supervisor

JOB DATA
Tasks
Performance standards
Responsibilities
Knowledge required
Skills required
Experience needed
Job context
Duties
Equipment used

METHODS OF COLLECTING DATA
Interviews
Questionnaires
Observations
Records

JOB DESCRIPTION
Tasks
Duties
Responsibilities

HUMAN RESOURCES FUNCTIONS
Recruitment
Selection
Training and development
Performance appraisal
Compensation management

JOB SPECIFICATION
Skill requirements
Physical demands
Knowledge requirements
Abilities needed

Methods of Collecting Job Data

The methods of collecting job-related data are (i) observational method, (ii) interviews, (iii) questionnaire, (iv) checklists, (v) technical conferences, and (vi) diary. A combination of these approaches may be used depending upon the situation and the organization. A brief description of each method is in order

Observation

In this method, the job analyst carefully observes the job holder at work and records what he or she does, how he or she does, and how much time is needed for completion of a given task. This method has both positive as well as negative sides. On the positive side, the method is simple, and the data collected are accurate because of direct

observation. On the flip side, it may be told that the method is time consuming and inapplicable to jobs which involve high proportions of unobservable mental activities and those which do not have complete and easily observable job cycles.

The analyst needs to be trained to carefully observe and record the competence of a job incumbent. And training means additional cost. Considering all these, the observation method may be used for analyzing repetitive, short-cycle, unskilled and semi-skilled jobs. Better results will be available when the observation method is used along with other method(s) of job analysis.

Interview

In this, the analyst interviews the job holder and his/her supervisor to elicit information about the job. Usually, a structured interview form is used to record the information. During the interview, the analyst must make judgements about the information to be included and its degree of importance.

The interview method is time consuming. The time problem will be compounded if the interviewer talks with two or more employees doing the same job. Furthermore, professional and managerial jobs are more complicated to analyze and usually require a longer interview. Then, there ts the problem of bias. Bias on the part of the analyst and the job holder may cloud the accuracy and objectivity of the data obtained. The interview method has one positive feature, that is, it involves talking to the job holders who are in a good position to describe what they do, as well as the qualifications needed to perform their duties in a competent manner.

READ What is Orientation and Purpose of Orientation?

The effectiveness of the interview method depends on the interviewer and on the ability of the job holder to make meaningful responses.

Questionnaire

Job holders fill in the given structured questionnaires, which are then approved by their supervisors. The filled-in questionnaires offer enough data on jobs. Standard questionnaires are available or they may be prepared for the purpose by the analysts. Standard or prepared, questionnaires should contain the following basic information:

1. The job title of the job holder;
2. The job title of the job holder's manager or supervisor;
3. The job titles and numbers of the staff reporting to the job holder (best recorded by means of an organization chart);
4. A brief description (one or two sentences) of the overall role or purpose of the job; and
5. A list of the main tasks or duties that the job holder has to carry out; as appropriate, these should specify the resources controlled, the equipment used, the contracts made and the frequency with which the tasks are carried out.

The questionnaires method has its own advantages and limitations. The major advantage of the questionnaire method is that information on a large number of jobs can be collected in a relatively short period of time. But some follow-up observations and discussions are necessary to clarify inadequately filled-in questionnaires and interpretation problems. Further, the questionnaire method helps save time and the staff required to carry out the programme. Finally, all the job holders participate in the method unlike in an interview where one or two workers only would participate.

Checklists

A checklist is similar to a questionnaire, but the response sheet contains fewer subjective judgements and tends to be either-yes-or-no variety. Checklists can cover as many as 100 activities and job holders tick only those tasks that are included in their jobs. Preparation of a checklist is a challenging job. The specialists who prepare the list must collect all relevant information about the job concerned. Such information can be obtained by asking supervisors, industrial engineers, and others familiar with the work.

When a checklist has been prepared for a job, it is sent to the job holder. The job holder is asked to check all listed tasks that he/she performs and indicate the amount of time spent on each task as well as the training and experience required to be proficient in each task. He/she may also be asked to write any additional tasks he/she performs which is not stated in the checklist.

READ Methods of Performance Appraisal

One advantage of the checklist method is that it is useful in large firms that have a large number of people assigned to one particular job. Also, this technique is amenable to tabulation and recording on electronic data-processing equipment. The technique, however, is costly and, hence, not suitable for small firms.

Technical Conference Method

In this method, services of supervisors who possess extensive knowledge about a job are used. It is from these experts that details about the job are obtained. Here, a conference of supervisors is used. The analyst initiates discussion which provides details about jobs. Though a good method of data collection, this method lacks accuracy because the actual job holders are not involved in collecting information.

Diary Method

This method requires the job holders to record in detail their activities each day. If done faithfully, this technique is accurate and eliminates errors caused by memory lapses the job holder makes while answering questionnaires and checklists. This method, however, is time consuming because the recording of tasks may have to be spread over a number of days. It also engages considerable time of a production worker. No wonder, the diary method is not used much in practice.

The methods described above are not to be viewed as mutually exclusive. None of them is universally superior. The best results can be obtained by a combination of these methods.

Quantitative Techniques

The methods of collecting job-related data, described above are used by most employers. But there are occasions where these narrative approaches are not appropriate. For example, where it is desired to assign a quantitative value to each job so that jobs can be compared for pay purposes, a more quantitative approach will be appropriate. The position analysis questionnaire, management position description questionnaire and functional job analysis are the three popular techniques of job analysis.

Position Analysis Questionnaire

The Position Analysis Questionnaire (PAQ) is a highly specialized instrument for analyzing any job in terms of employee activities. The PAQ contains 194 job elements on which a job is created depending on the degree to which an element (or descriptor) is present. These elements are grouped into six general categories.

READ Four Approaches to Job Design

The primary advantage of the PAQ is that it can be used to analyze almost every job. Further, this analysis provides a comparison of a specific job with other job classifications, particularly for selection and remuneration purposes. However, the PAQ needs to be completed by trained job analysts rather than incumbents or supervisors, since the language in the questionnaire is difficult and at a fairly high reading level.

Management Position Description Questionnaire

The Management Position Description Questionnaire (MPDQ) is a highly structured questionnaire containing 208 items relating to managerial responsibilities, restrictions, demands and other miscellaneous position characteristics.

Functional Job Analysis

Functional Job Analysis (FJA) is a worker-oriented job analytical approach which attempts to describe the whole person on the job. The main features of FJA include the following:

1. A fundamental distinction must be made between what has been done and what employees need to do to get the things done. For example, bus crew do not carry passengers, but they drive vehicle and collect fare.

2. Jobs are performed in relation to data, people and things.

3. In relation to things, employees draw on physical resources; in relation to data, employees draw on mental resources; and in relation to people, employees draw on interpersonal resources.

4. All jobs require employees to relate data, people and things to some degree.

Job Analysis and Total Quality Management (TQM)

TQM is a management approach that concentrates on teamwork, integrity, continuous improvement and continuous assessment jobs and their worth. On the other hand, job analysis deals in investigating each job separately and collecting the job-related information. Usually, the process is conducted in an organization once in a while especially when HR department has to source candidates for a particular job. TQM is a new approach and is almost inconsistent with traditional management approaches and processes. Job Analysis is no exception.

Points of Inconsistency between Job Analysis and TQM

The concept of Total Quality Management stresses on continuous improvement of management processes as well as employees. For example, if employee joins an organization at a certain level, according to TQM, he or she should not confine themselves to their basic jobs only. Instead they should consider other options and try to learn more and more in order to explore other areas of operations. Whereas, job analysis process is conducted to determine what an employee is supposed to do and how specific duties and activities need to be performed.

Total Quality Management approach focuses on an all-round development of employees and expects them to do everything while on job in order to attain higher levels of quality. It also concentrates on their continuous improvement personally as well as professionally. While job analysis defines specific duties and responsibilities of an employee and each one of them is supposed to do only what is assigned to them. The concept is just opposite to TQM approach.

The job description and job specification talk about employee's job title, job summary, job duties, job responsibilities, educational qualifications and working conditions. While it does not discuss about maintaining quality in operations, treating waste and scraps properly and quality of services delivered. It simply gives brief details about what an employee needs to do and how. Though it deals in assessing a job but has nothing to do with improving quality in operations.

TQM does not confine employees only to a particular job. The concept leaves scope for additional duties along with the basic job duties. Whereas, it is not true in case of job analysis. It simply measures the worth of a job and determines the duties involved in it. Employees are not encouraged to explore other areas of operations. Instead they are supposed to perform only the assigned job.

Relevance of Job Analysis

Job Analysis is not consistent with TQM. They do not go hand in hand as they focus on entirely different theories and operate on different models. But it does not mean that job analysis has lost its relevance in today's world. It has its own importance and is still required to be carried out as this gives basic information related to specific jobs and helps managers in decision making process.

It assists in various other management processes including recruitment and selection, job evaluation, performance evaluation and appraisal and training and development need analysis. It also regulates the entry of talent in an organization and helps in sourcing and attracting a pool of talent to work with the organization

Potential Problems with Job Analysis

No process can be entirely accurate and fully serves the purpose. Job analysis is no exception to it. The process involves a variety of methods, tools, plans and a lot of human effort. And where 'people' are involved, nothing can be 100 percent accurate. However, they may be appropriate considering various factors including organizational requirements, time, effort and financial resources. Since the entire job analysis processes, methods and tools are designed by humans only, they tend to have practical issues associated with them. Human brain suffers with some limitations, therefore, everything created, designed or developed by humans too have some or other constraints.

Coming back to the subject, even the process of job analysis has lot of practical problems associated with it. Though the process can be effective, appropriate, practical, efficient and focused but it can be costly, time consuming and disruptive for employees at the same time. It is because there are some typical problems that are encountered by a job analyst while carrying out the process. Let's discuss them and understand how the process of job analysis can be made more effective by treating them carefully.

Problems with Job Analysis
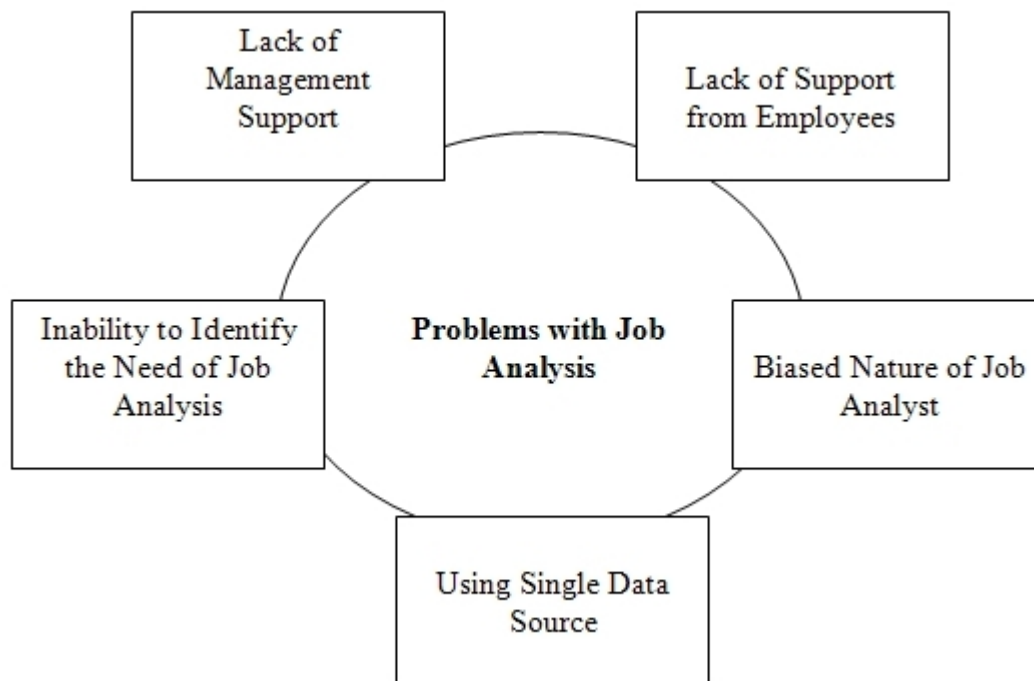
- **Lack of Management Support:** The biggest problem arises when a job analyst does not get proper support from the management. The top management needs to communicate it to the middle level managers and employees to enhance the output or productivity of the process. In case of improper communication, employees may take it in a wrong sense and start looking out for other available options. They may have a notion that this is being carried out to fire them or take any action against them. In order to avoid such circumstances, top management must effectively communicate the right message to their incumbents.
- **Lack of Co-operation from Employees:** If we talk about collecting authentic and accurate job-data, it is almost impossible to get real and genuine data without the support of employees. If they are not ready to co-operate, it is a sheer wastage of time, money and human effort to conduct job analysis process. The need is to take the workers in confidence and communicating that it is being done to solve their problems only.
- **Inability to Identify the Need of Job Analysis:** If the objectives and needs of job analysis process are not properly identified, the whole exercise of investigation and carrying out research is futile. Managers must decide in advance why this process is being carried out, what its objectives are and what is to be done with the collected and recorded data.
- **Biasness of Job Analyst:** A balanced and unbiased approach is a necessity while carrying out the process of job analysis. To get real and genuine data, a job analyst must be impartial in his or her approach. If it can't be avoided, it is better to outsource the process or hire a professional job analyst.
- **Using Single Data Source:** A job analyst needs to consider more than one sources of data in order to collect true information. Collecting data from a single source may result in inaccuracy and it therefore, defeats the whole purpose of conducting the job analysis process.

However, this is not the end. There may be many other problems involved in a job analysis process such as insufficient time and resources, distortion from incumbent, lack of proper communication, improper questionnaires and other forms, absence of verification and review of job analysis process and lack of reward or recognition for providing genuine and quality information.

REQUISITES FOR JOB ANALYSIS

- The job analysis should be so designed that derivation of job descriptions and job specifications. become easy.
- Managers should communicate all relevant information to employees concerning the job analysis to prevent unnecessary uncertainty and anxiety.
- When major organizational changes take place, job analysis should be undertaken.
- The purpose of job analysis, the extent of employee involvement, the type of information required and the levels of details required should be specified.
- All the steps in job analysis should be followed while collecting job related data.

Competency based Job Analysis

Not coincidently, many employers and job analysis experts say traditional job analysis procedures canâ€™t go on playing a central role in HR management. Their basic concern is that in high performance work environment in which employers need workers to seamlessly move from job to job and exercise self-control, job description based on lists of job-specific duties may actually inhibit (or fail to encourage) the flexible behavior companies need. Employers are therefore shifting toward newer approaches for describing jobs, one of which, competency-based analysis.

Competencies can be simply defined as demonstrable characteristics of the person that enable performance. Job competencies are always observable and measurable behaviors comprising part of a job. Unfortunately, once we get beyond that simple definition, thereâ€™s some confusion over what exactly â€œCompetenciesâ€ mean. Different organizations define â€œcompetenciesâ€ in somewhat different ways. Some define them more broadly and use â€œcompetenciesâ€ synonymously with the knowledge or skills or abilities a person needs to do the job.

Others define competencies more narrowly in terms of measurable behaviors. Here the context would be to identify the job's required competencies by simply completing the phrase, "In order to perform this job competently, the employee should be able to:….."

Competency-based job analysis means describing the job in terms of the measurable, observable, behavioral competencies (Knowledge, skills and/or behaviors) that an employee doing that job must exhibit to do the job well. This contrasts with the traditional way of describing the job in terms of job duties and responsibilities. Traditional job analysis focuses on "what" is accomplished on duties and responsibilities. Competency analysis focuses more on "how" the worker meets the job's objectives or actually accomplishes the work. Traditional job analysis is thus more Job focused. Competency-based analysis is more worker focused specifically, what must he or she be competent to do?

Why use Competency Analysis? There are three reasons to describe jobs in terms of competencies rather than duties. First as mentioned earlier, traditional job descriptions with their lists of specific duties may actually backfire if a high performance work system is the employer's goal. The whole thrust of these systems is to encourage employees to work in a self-motivated way, by organizing the work around teams, by encouraging team members to rotate freely among jobs (each with its own skill set) by pushing more responsibility for things like day-to-day supervision down to the workers and by organizing work around projects or processes in which jobs may blend or overlap. Employees here must be enthusiastic about learning and moving among jobs. Giving someone a job description with a list of specific duties may simply breed a "that's-not- my-job" attitude, by compartmentalizing workers too narrowly.

Second, describing the job in terms of the skills, knowledge, and competencies the worker needs to be more strategic. For example, Canon's strategic emphasis on miniaturization and precision manufacturing means it should encourage some employees to develop their expertise in these two strategically crucial areas.

Third, measurable skills, knowledge, and competencies are the heart of any company's performance management process. As at Canon, achieving a firm's strategic goals means that employees must exhibit certain skills and competencies. Performance management means basing employees' training, appraisals, and rewards on fostering and rewarding the skills and competencies he or she needs to achieve his or her goals. Describing the job in terms of skills and competencies facilitates this.

Examples of Competencies: In practice, managers often write paragraph-length competencies for jobs, and organize these into two or three clusters. For example, the job's required competencies might include general competencies such as reading, writing, and mathematical reasoning, leadership competencies such as leadership, strategic thinking, and teaching others and technical competencies which focus on the specific technical competencies required for specific types of job and/or occupations.

Illustrations:

Some technical competencies for the job of systems engineers might include the following:

1. Design complex software applications, establish protocols, and create prototypes.

2. Establish the necessary platform requirements to efficiently and completely coordinate data transfer.

3. Prepare comprehensive and complete documentation including specifications, flow diagrams, process patrols, and budgets.

Similarly, for a corporate treasurer, technical competencies might include:

1. Formulate trade recommendation, by studying several computer models for currency trends, and using various quantitative techniques to determine the financial impact of certain financial trades.

2. Recommend specific trades and when to make them.

3. Present recommendations and persuade others to follow the recommended course of action (Note that exhibiting this competency presumes the treasurer has certain knowledge and skills tat one could measure).