

# MIS ON HUMAN SELECTION AND RECRUITMENT

**Tarapara Hirenkumar<sup>1</sup>, Param Khanpara<sup>2</sup>, Shubham Dave<sup>3</sup>**

<sup>1</sup>Institute Of Technology, Nirma University (India)

<sup>2</sup>Institute Of Technology, Nirma University (India)

<sup>3</sup>Institute Of Technology, Nirma University (India)

## ABSTRACT

*Selection and recruitment is the main HR function and it is necessary to keep the database of the persons that had given interviews in the past. This information is the part of HR Management Information System and is maintained by HR department along with other information such as employee information, transfers, performance appraisals, trainings etc. This recruitment Management Information System database includes all candidates after the interviews are been taken. When candidates go through different stages of interviews, Management Information System captures all their interview results. Maintaining this information helps other senior managers to find short listed/ interviewed candidates from database without wasting time. As this Management Information System data contains personal information like, salary negotiations etc., the access to this data should be restricted only to few senior managers. The Management Information System administrator may permit read/write access to different database based on role and responsibility of manger in their organization.*

**Keywords: Interviews, Selection, Payroll, Database.**

## I. INTRODUCTION

The method of the recruitment is quite simple. Its process is not just selecting individual in an organization as per his/her professional skills but also by analysing his/her social skills most of the times. The right choice of the person should be made so that he fits the job description completely. Any selection of the wrong candidate will not only make the chaos but would also lead to the loss of the organization. It is generally carried out by HR department but sometimes also carried out by third party. The aim of the recruitment is to attract the people. Any organization would try to attract more number of people so that they would apply for the job. They carry out this process by advertising so that to get the cream of the crowd for their organization. Recruitment is basically based on the current and the future need of the company. The HR department analyses requirements available and recruit the best persons for the job. This might be carried out either internally or externally. In this process, the employer has the ability to select any person that fits the requirement of the organization. Most of the time, the organization accompany the HR department for the recruitment so that the right candidate that actually meets the organizational requirement is selected. Recruitment can be made in ways like internal, external, referral, etc. Recruitment is an important part of the organizational growth and so must be understood properly and carried out in the best possible way. Well planned recruitment process helps a company to filter out the candidates who do not pass their criterion and hence concentrate more on the eligible candidates.

## II. IMPORTANCE OF SELECTION AND RECRUITMENT

The success of any organization depends on good and efficient people working in it. The Human Resource hires good employees for the organization.

Here are the main functions of HR in an organization:

- Selection of candidates having right skills for right position in the organization.
- Performance appraisal - to motivate employees for working hard and convincing that their work will be counted.
- Rewards and punishment - the employees who are sincere and hard working must be rewarded and compensated.
- Skill development - to ensure the appropriate development of the skilled staffs.
- Retaining employees-to retain the good employees for longer term.
- Creating working environment - to ensure that the organization's environment is free from tensions and is fun filled.
- Building reputation - to build good reputation. Difficulties in selecting right people: It is difficult to find right people to recruit in the right place. The difficulties in hiring right candidates vary with organization, job requirements and other conditions.
- Organizations with very good reputation get large number of application. They don't face problems in finding the right candidates from numerous applicants.
- Unknown and new organizations don't get good candidates for the right job. They use different sources for finding candidates. They have to struggle a bit.
- In few cases there may be many applicants but the nature of job is different so skills mismatches with the required skills.
- Unattractive Jobs: If the job is unattractive, most prospective candidates may not even apply. The Job is boring, devoid of career growth opportunities, anxiety producing and not reward performance in proper way.
- Government policy: Policies often come in the way of selection. Policies like reservations have to be observed.

Process of selection and recruitment:

Selection and recruitment is a continuous process. The process generally involves the following activities.

- Informing about the job vacancy through newspaper, online advertisement, company websites, campus interviews, word-of-mouth and other means.
- Receiving resume of candidates and classifying candidates according to their skills. Every job requires different skills and involves different tasks. The job requirement should match the skills of the applicants.
- The first step of selection is elimination that means short listing the candidates. There can be hundreds of applications so it is necessary to eliminate candidates as many as possible.
- Calling the selected candidates for aptitude test. This helps to eliminate the weaker candidates and to select the stronger candidates.

- The next activity is to invite the selected candidates for an interview. The interview may be with a panel of interviewers, a single interviewer, telephonic interviews, a series of interviews, Interviews followed by group discussions, video conferencing, etc.
- There is again an interview that is final interview with executive director or somebody of higher position. This process helps to reassess the selection process and negotiation of salary package.

However, every organization follows the different process for selection and recruitments. Some organizations get applications directly from the candidates while some depend on the external recruitment agencies to find right candidates.

### III. ROLE OF SELECTION OF IT IN RECRUITMENT AND SELECTION

Information Technology plays a leading role in selection and recruitment process. It can be illustrated as:

- The advertisement of job vacancies is given through electronic media and websites.
- The candidates can apply via emails, online forms for applications, etc.
- All this information of candidate are stored for the purpose of sorting, searching, grouping based on different criteria and filtering in database by the HR manager.
- Testing and evaluation of technical/administrative skills.
- Conduction of video conference.
- Maintaining the ratio of number of candidates interviewed, advertisement given and total number of vacancies.
- Recruitment can also be boosted using social internetworking site.

The data pertaining to selection and recruitment and IT tools used:

The first and foremost step is the collection the data of each and every candidate and storing them in the database. This data can be stored in the database with the help of spreadsheet, emails and other software. This kind of information is preserved by the HR manager of the organization (internally) or by the consultant advisor who is hired by the organization. As the number of candidates would be large, their database would also be large and so it is not efficient to store such data into the spreadsheet. To store such large data into the database, different software are used which help use to filter, sort and group several data.

Problems Faced in Maintaining the Data:

There are various problems faced by the HR manager to preserve the data of the candidate. First of all, the application given by the candidate can be in any format such as:

- Email or attachment
- Submitting hardcopy directly in the office
- Submitting through post
- Filling Online Form
- And several other methods

Each and every way has its own problem. Sometimes, candidates send their CV in the body section of the mail or sometimes by sending application in the mail and attaching CV as the separate file. In many cases, there may be more than one attachment, insufficient information, etc. Attachments may be sent in different formats like MS Word, PDF, Open Office, etc.

- The applicants go on increasing.
- No efficient method for searching attachments.
- Some candidates may cause duplication.
- Application comes in various types of format.
- Applications may be stored at different places.
- Transferring this information nearly becomes impossible.

Solution of the Problem:

HR manager imposes various methods to get rid of the above discussed problem.

- Maintaining the list of only those candidates who are selected. This helps us to reduce the database.
- Using software for storing candidate's data.
- Taking the help of the consultant advisor so that HR manager doesn't have to worry about maintaining the database during the process of recruitment.
- Help of social networking sites, online job-application sites, etc. can be taken.

## VI. DATA ON RECRUITMENT AND SELECTION USING MIS

The process of recruitment starts from the various procedures of separating the better applicants from others by Aptitude, Personality and Technical tests. After this step of obviating the contenders, the next step is very important where the HR dept. has to keep a proper database on each and every selected candidate along with all their important data. This type of collection of data is usually done every time the company goes for recruitment at a particular place but apart from it, with recent advances in storage facilities and need of data analyzing for better recruitment, the companies have started to keep old data from previous recruitment which is much larger and need to be properly organized to utilize it well. Though, this type of database is smaller as compared to database of the whole batch of candidates, it is very much helpful in company's other recruitment situation where certain candidates could be easily eliminated on the basis of their poor performances in previous interviews instead of re-taking their interview from the scratch.

Features present in MIS of Recruitment and Selection:

- Easy filtering by selection of proper filters
- Proper Data Entry facility without requiring much knowledge about MIS
- Access Management and Control
- Flexibility of format of CV or Resume of applicants
- Data Analysis facility which provides Feedback on Recruitment process and changes required, if any.

Identification of Data required for MIS of Recruitment and Selection:

- The applicants who have been previously screened for recruitment
- The applicants who have been selected in interviews but were not for final appointment
- The applicants who fit the present criteria recruited in other dept. of organization which could be replaced by other applicants from the screened applicants
- The applicants who are having a decent recommendation from trusted organizations or persons
- Results of all the online/written or any such other tests of the candidates
- Description about performances of the applicants in the various segments of the interview procedure

Comparing the sizes of candidates' database and candidates' MIS database:

Although in the original database of all the candidates, there are thousands of resumes in all but not all are kept by the company in their database of MIS for recruitment. Only the database of the selected candidates who have been thoroughly screened from the above mentioned process are kept which makes the size of storage much lesser and also more easily manageable for the future.

	<b>Database of all applicants</b>	<b>Database of screened applicants</b>
1	Is huge in size and needs lots of Organizing	Is smaller in size and requires less organizing
2	Only few organizations can afford to manage such huge data	Every organization must maintain this data for MIS purposes
3	Is required for initial screening only	Is required for final selection of candidates
4	Is needed to be entered by Data Managers manually	Can be directly taken from Database of all applicants if formed previously

Advantages of using MIS in Recruitment and Selection process:

MIS has started to take place as an important decision making tool in all types of departments of all industries and so even the HR department of every company has also its utilities for better execution of its work with

efficiency along with the easy usage and flexibility of comparison of all required criteria with the available data of the applicants.

- Whenever a job opening comes up, the HR dept. have to just lookup in the database of MIS of previous recruitments and find whether the needed criteria are being sufficed by any candidates and if it is found that no candidate fits the required criteria, then further interviews are held to find proper applicant.
- It eliminates the time and resources used to again interview the candidates who have been interviewed and found unsuitable.
- Filters all the previously selected candidates on the basis of present criteria and thereby, data about the applicants who fit the criteria but where not recruited in any of the previous recruitments can be found, which makes it easy and faster to contact them for the open positions and further discussion about salary, allowances, etc.
- We can easily have results of present and previous recruitments for comparison and reference by use of MIS.

Disadvantages of not using MIS in Recruitment and Selection:

MIS system for storage of all this data means proper storage of all the data along with the access rules which defines that who has access to those data whenever required. Besides this, proper maintenance of the data already stored and newly appending data with each new recruitment. Previously, for storage of database file systems were used which would be kept and managed by HR manager himself. The approach of file storage had significant disadvantages of requiring more storage space, troublesome handling, inefficient retrieval of information and access. Organizing the data of recruitment in files would be more difficult with such a variety of details of the different types of jobs in different departments of the company and data of candidates. Other factors that affect the data security and quality of Recruitment and Selection data are system crash, manual mistakes and threats of virus, spywares, etc. Risks related to quality of such important information is top priority of any organization and this is where the MIS system has its part to play. Also, this data doesn't reach the team members of HR dept. even to people with the proper access authorities at times and so, if a HR leaves a company, there is more chance of the company losing all the data of all recruitments done until now.

## V. DATA ENTRY

Data entry is a boring task but it's an important aspect. Entering the data is quite important and is also useful but problem occurs when data is lost or some error occurs and we are not able to access the data. First of all, let's determine the nature of data and then about who could enter the data.

The entry process is basically divided into two categories: Before the interview and after the interview category

Entry of data before the interview:

The data before the interview mainly contains basic information of the candidate like his/her education and experience. Before the interview all this data should be entered. All this data should be entered by the same person so that simplicity would be maintained.

Entering data related to interview:

Interview, interviewers and interview results, etc. are the data related to interview. Nature of this data should be confidential. Family details, medical details, salary negotiations, etc. type of sensitive data are also included. Due to this all this data should be maintained safely. It is very difficult to decide who should enter the data. Structure of organization, type of interview and interviewers and other environmental conditions decides this. The way is that the interviewer should enter all this kind of data. The problem with this is that there may be multiple interviewers and apart from that external consultant may also be there. Solution of this is that is having a coordinator of the organization who used to do the entry. If any of these fails to do the entries then the HR Manager enters the data into the database.

#### Integrity and Validation of Data:

The data enters should be a valid and correct one. Before entering the data it should be passed through various validation processes. It could be illustrated as,

- The validation of the email should be carried out to check its correct format.
- Characters should not be allowed in the phone number and only digits should be there.
- In data entry for convenience, some fields should allow null values and for usefulness and for data maintenance, some fields should not allow null value.
- A row as a unique entity could be defined by entity integrity in a table.
- A column as a unique entity could be defined by domain integrity in a table.
- Between two tables the relationship could be preserved when addition or deletion of the records are carried out using referential integrity. The referential and entity-domain integrity could be enforced using both PRIMARY and FOREIGN KEY.
- Business rules that are additional and do not fall in any of the category of integrity could be defined by the administrator using user-defined integrity.

In each and every table there should be an unique constraints that could be used to create uniqueness of a non primary key columns. The function used for to create this kind of uniqueness is similar to Primary key but the main difference is that it should not have null values.

## VI. RECRUITMENT ADMINISTRATION

Basically, this is a part of the MIS and is handled by the administrator. This administer is generally IT or the IS manager or the person having the knowledge similar to that in the organization.

- Different data's of the MIS could be accessed by the different levels of the organization. In a basic scenario, most of them are given the read permission while few others are also given the write permission.
- Entering the data is an important task and so only selected persons should be allowed to do the data entry. This job could be done by the HR Manager to whom the rights are assigned by the MIS administrator.
- The people at the same level should only be allowed to access the confidential data. Personal behaviour, salary negotiations, medical data, etc. should be included in confidential data.

All the managers should be able to see the candidate reports. But only few senior managers would be able to see the results of the interview. The admin of MIS have the rights to select that to whom the visibility rights should be given.

## VII. SUMMARY AND CONCLUSION

It is the tedious job of maintaining a large database of all the candidates who applies for the job even though selection and recruitment is key HR function. For all those candidates who have been selected for the past interviews, a small database is also maintained for them. All this information are quite important and are considered as the part of HR MIS and should be maintained by HR department along with other information such as performance appraisals, employee information, trainings, transfers, etc.

All the candidates whose recruitment is over are also included in the database of recruitment MIS. The MIS database records get updated as the candidate goes through various interviews and stores the result as the round of interviews. With the help of this database not only the senior managers but also the HR Manager are helped to find quickly the short listed or the interviewed. MIS database contains confidential database and so its access must be restricted to only few senior managers so that privacy should be maintained. The administrator of the MIS should assign various permissions like read and write to various persons depending on their role as well as responsibilities of that person in the organization.

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