CHAPTER 2 – RESEARCH METHODOLOGY

2.1) Research Objective
2.2) Qualitative research
2.3) Sampling
2.4) Questionnaire
2.5) Secondary Books and Research sources
2.6) Current Analysis of Orient Paper Mills - Amlai (M.P.)

2.1) RESEARCH OBJECTIVE

2.1.1 Methodology:

Data for the analysis will be collected from the existing available sources of information including company guidelines, communication packs and from qualitative interviews – interviews with HR practitioners and interviews with line managers. In addition a questionnaire will be distributed to company employees.

Based on the surveyed questionnaires I will draw a conclusion if there is a correlation between clear purpose and understanding of performance appraisal, timely and consistent feedback on individual performance and there eventual effect on the employees satisfaction and engagement to the company. Assumption is that more engaged employees are more stimulated to stay in the organisation and to work harder for meeting business objectives.

The hypothesis is “there is a correlation between clear purpose and understanding of performance appraisal and the level of satisfaction and staff engagement.”

Through the questionnaires I will seek responses on 2 types of questions for both parts of the hypothesis. Answers will be reviewed and analysed with the support of a statistical methods.
There will be some recommendations for best practise use and improvement of the appraisal process in the final part of the research. They would be sourced again from the interviews with line managers and the literatures examined.

The chapter on research methodology elaborate in details the procedure which researchers will use in collecting data. It entails how the topic under review will be examined and why some techniques will be preferred to others. It must be noted that a good data must be reliable, credible and relevant. So, as to achieve a good result of this research, techniques or methods which will be convenient to use are employed under specific situation to give an accurate, valid, logical and satisfactory analysis of the data.

In lieu of this researchers wish to discuss the topic under the following headings:

- Area of study,
- Population,
- Sampling size,
- Techniques and methods of data collection,
- Tools of data presentation

This chapter deals with the methods, the researchers used in gathering and analysing data collected. As to achieve a good result of this research work the data collected must be reliable.

**2.2.2 Objective:**

The aim of this study is to explore the operation and effects of Performance Appraisal in companies. It will assess whether the appraisal process creates a positive response or negative response from employees and assess the subsequent impact on employee’s attitudes and behaviours. The appraisal process studied is that of a company in India. The appraisal system of this company was designed to improve employee productivity. The findings, suggests that the Performance appraisal system is important in the company among employees and the organisation. This study also
explains how performance appraisal systems have encouraged employee development in the organisation considered.

2.2.3 Research objective:

Research Methodology is a way to systematically solve the research problem. It is a science of studying how research is done scientifically. It involves data collection techniques the method of analysis of data, there interpretation and final summarisation.

a) There basic objective is to know the process of recruiting financial advisor in the company.

b) Identifying key areas which need improvement.

The purpose of research is to discover answers to questions through the application of scientific procedures. The main aim of research is to find out the truth which is hidden and which has not been discovered as yet. Research objectives have following broad groupings:

a) To gain familiarity with a phenomenon or to achieve new insights into it.

b) To portray accurately the characteristics of a particular individual, situation or a group.

c) To determine the frequency with which something occurs or with which it is associated with something else.

d) To test a hypothesis of a casual relationship between variables.

2.2) QUALITATIVE RESEARCH

Qualitative research is a method of inquiry employed in many different academic, disciplines, traditionally in the social sciences, but also in market research. On the other hand, it is concerned with qualitative phenomenon, i.e., Phenomenon relating to or involving quality or kind. For instance, when we are interested in
investigating the reasons for human behaviour (i.e., why people think or do certain things.)

‘Motivation research’ is an important type of qualitative research. This type of research aims at discovering the underlying motives and desires, using in depth interviews for the purpose. Other techniques of such research are word association tests, sentence completion tests, story completion tests, and similar other projective techniques. Attitude or opinion research i.e., research designed to find out how people feel or what they think about a particular subject or institution is also qualitative research. Qualitative research is especially important in the behavioural sciences where the aim is to discover the underlying motives of human behaviour. Through such research we can analyse the various factors which motivate people to behave in a particular manner or which make people like or dislike a particular thing. It may be stated, however, that to apply qualitative research in practice is relatively a difficult job and therefore, while doing such research, one should seek guidance from a experimental psychologists.

Qualitative Researchers aim to gather an in-depth understanding of human behaviour and the reasons that govern such behaviour. The qualitative method investigates the why and how of decision making, not just what, where, when. Hence, smaller but focused samples are more often needed than large samples.

In the conventional view, qualitative methods produce information. Qualitative research often categorises data into patterns as the primary basis for organising and reporting results. Qualitative Researchers typically relay on the following methods for gathering information- participant observation, non participant observation, field notes, reflexive journals, structured interview, semi structured interview, unstructured interview and analysis of documents and materials.

2.3) SAMPLING

All items in any field of inquiry constitute a ‘universe’ or ‘population’. A complete enumeration of all items in the ‘population’ is known as a census inquiry. It
can be presumed that in such an inquiry, when all items are covered, no element of chance is left and highest accuracy is obtained. But in practice this may not be true. Even the slightest element of bias in such an inquiry will get larger and larger as the number of observation increases. Moreover, there is no way of checking the element of bias or its extent except through a resurvey or use of samples checks besides, this type of inquiry involves a great deal of time, money and energy. Therefore, when the field of inquiry is large this method becomes difficult to adopt because of the resources involved. At times, this method is practically beyond the reach of ordinary researchers. Perhaps, government is the only institution which can get the complete enumeration carried out. Even the government adopts this in very rare cases such as population censes conducted once in a decade. Further, many a time it is not possible examine every item in the population, and sometimes it is possible to obtain sufficiently accurate results by studying only a part of total population. In such cases there is no utility of census surveys.

However, it needs to be emphasised that when the universe is a small one, it is no use resorting to a sample survey. When field studies are undertaken in practical life, considerations of time and cost almost invariably lead to a selection of respondents i.e. selection of only a few items. The respondents selected should be as representative of the total population as possible in order to produce a miniature cross section. The selected respondents constitutes what is technically called a ‘sample’ and the selection process is called ‘sampling technique’. The survey so conducted is known as ‘sample survey’.

Algebraically, let the population size be $N$ if a part of size $n$ (which is $<N$) this population is selected according to some rule for studying some characteristics of the population, the group consisting of these $n$ units is known as ‘sample’. Researcher must prepare a sample design for his study i.e. he must plan how a sample should be selected and of what size such a sample would be.
Implication of a sample design:

A sample design is a definite plan for obtaining a sample from a given population. It refers to the technique or the procedure the researcher would adopt in selecting items for the sample. Sample design may as well lay down the number of items to be included in the sample i.e. the size of the sample. Sample design is determined before data are collected. There are many sample designs from which a researcher can choose. Some designs are relatively more precise and easy to apply than others. Researcher must select a sample design which should be reliable and appropriate for his research study.

Steps in sample design:

While developing a sampling design, the researcher must pay attention to the following points:

a) Type of universe: The first step in developing any sample design is to clearly define the set of objects, technically called the universe. The universe can be finite or infinite. The population of a city, the number of workers in a factory and the like are examples of finite universe, whereas the number of stars in the sky, listeners of a specific radio programme, throwing of a dice etc. are examples of infinite universe.

b) Sampling unit: A decision has to be taken concerning a sampling unit before selecting sample. Sampling unit may be a geographical one such as state, district, village etc. or a social unit such as family, club, school, etc. or it may be an individual.

c) Source list: It is also known as ‘sampling frame’ from which sample is to be drawn. It contains the names of all items of a universe.

d) Size of sample: This refers to the number of items to be selected from the universe to constitute a sample. The size of sample should neither be excessively large, nor too small. It should be optimum.

e) Parameters of interest: It should be kept in view while deciding the size of the sample.
f) Budgetary constraint: cost considerations, from practical point of view, have a major impact upon decisions relating to not only the size of the sample but also to the type of sample.

g) Sampling procedure: Finally, the researcher must decide the type of sample he will use i.e., he must decide about the technique to be used in selecting the items for the sample.

➤ **Characteristics of a good Sample Design:**

The characteristics of a good sample design as under:

a) Sample design must result in a truly representative sample.

b) Sample design must be such which results in a small sampling error.

c) Sample design must be viable in the context of funds available for the research study.

d) Sample design must be such so that systematic bias can be controlled in a better way.

e) Sample should be such that the results of the sample study can be applied, in general, for the universe with a reasonable level of confidence.

☞ **Different types of Sample Design:**

There are different types of sample designs based on two factors viz., the representation basis and the element selection technique. On the representation basis, the sample may be probability sampling or it may be non-probability sampling. Probability sampling is based on the concept of random selection, whereas non-probability sampling is ‘non-random’ sampling. On element selection basis, the sample may be either restricted or unrestricted. When each sample element is drawn individually from the population at large, then the sample so drawn is known as ‘unrestricted sample’, whereas all other forms of sampling are covered under the term ‘restricted sampling’.

Thus, sample designs are basically of two types viz., non-probability sampling and probability sampling.
**Chart showing basic sampling designs**

<table>
<thead>
<tr>
<th>Element Selection Technique</th>
<th>Representation basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unrestricted sampling</td>
<td>Probability sampling</td>
</tr>
<tr>
<td></td>
<td>Non-probability sampling</td>
</tr>
<tr>
<td></td>
<td>Simple random sampling</td>
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<tr>
<td></td>
<td>Haphazard sampling or convenience sampling</td>
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<tr>
<td>Restricted Sampling</td>
<td>Complex random sampling (such as cluster sampling, systematic sampling, stratified sampling, etc.)</td>
</tr>
<tr>
<td></td>
<td>Purposive sampling (such as quota sampling, judgement sampling)</td>
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**2.4) QUESTIONNAIRE**

This method of data collection is quite popular, particularly in case of big enquiries. It is being adopted by private individuals, research workers, private and public organisations and even by governments. In this method a questionnaire is sent (usually by post) to the persons concerned with a request to answer the questions and return the questionnaire. A questionnaire consists of a number of questions printed or typed in a definite order on a form or set of forms. The questionnaire is mailed to respondents who are expected to read and understand the questions and write down the reply in the space meant for the purpose in the questionnaire itself. The respondents have to answer the questions on their own.
The method of collecting data by mailing the questionnaires to respondents is most extensively employed in various economic and business surveys. The merits claimed on behalf of this method are as follows:

i. There is low cost even when the universe is large and is widely spread geographically.

ii. It is free from the bias of the interviewer, answers are in respondents own words.

iii. Respondents have adequate time to give well thought out answers.

iv. Respondents who are not easily approachable can also be reached conveniently.

v. Large samples can be made use of and thus the results can be made more dependable and reliable.

The main demerits of this system can also be listed here:

i. Low rate of return of the duly filled in questionnaire; bias due to no-response is often indeterminate.

ii. It can be used only when respondents are educated and cooperating.

iii. The control over questionnaire may be lost once it is sent.

iv. There is inbuilt inflexibility because of the difficulty of amending the approach once questionnaires have been despatched.

v. There is also the possibility of ambiguous replies or omission of replies altogether to certain questions; interpretation of omissions is difficult.

vi. It is difficult to know whether willing respondents are truly representative.

vii. This method is likely to be the slowest of all.

Before using this method, it is always advisable to conduct ‘pilot study’ for testing the questionnaires. In a big enquiry the significance of pilot survey is felt very much. Pilot survey is infects the replica and rehearsal of the main survey. Such a survey, being conducted by experts, brings to the light the weaknesses (if any) of the
questionnaires and also of the survey techniques. From the experience gained in this way, improvement can be effected.

Main aspects of a questionnaire:

Quite often questionnaire is considered as the heart of a survey operation. Hence, it should be very carefully constructed. If it is not properly set up, then the survey is bound to fail. This fact requires studying the main aspects of a questionnaire viz., the general form, question sequence and question formulation and wording.

Researcher should note the following with regard to these three main aspects of a questionnaire:

a) General form:

So far as the general form of a questionnaire is concerned, it can either be structured or unstructured questionnaire. Structured questionnaires are those questionnaires in which there are definite, concrete and pre-determined questions. The questions are presented with exactly the same wording and in the same order to all respondents. Resort is taken to this sort of standardisation to ensure that all respondents reply to the same set of questions.

The form of the question may be either closed (i.e., of the type ‘yes’ or ‘no’) or open (i.e., inviting free response) but should be stated in advance and not constructed during questioning. Structured questionnaires may also have fixed alternative questions in which responses of the informants are limited to the stated alternatives. Thus a highly structured questionnaire is one in which all questions and answers are specified and comments in the respondents own words are held to the minimum.

When these characteristics are not present in a questionnaire, it can be termed as structured or unstructured questionnaire. More specifically, in an unstructured questionnaire, the interviewer is provided with a general guide on the type of information to be obtained, but the exact question formulation is largely his own responsibility and the replies are to be taken down in the respondents own words to
the extent possible; in some situations tape recorders may be used to achieve this goal.

Structured questionnaire are simple to administer and relatively inexpensive to analyse. The provision of alternative replies, at times, helps to understand the meaning of the question clearly. But such questionnaires have limitations too. For instance, wide range of data and that too in respondents own words cannot be obtained with structured questionnaires. They are usually considered inappropriate in investigations where the aim happens to be to probe for attitudes and reasons for certain actions or feelings. They are equally not suitable when a problem is being first explored and working hypotheses sought. In such situations, unstructured questionnaires may be used effectively. Then on the basis of the results obtained in pre-test (testing before final use) operations from the use of unstructured questionnaires, one can construct a structured questionnaire.

b) Question sequence:

In order to make the questionnaire effective and to ensure quality to the replies received, a researcher should pay attention to the question sequence in preparing the questionnaire a proper sequence of questions reduces considerably the chances of individual questions being misunderstood. The question sequence must be clear and smoothly moving, meaning thereby that the relation of 1 question to another should be readily apparent to the respondent, with questions that are easiest to answer being put in the beginning. The first few questions are particularly important because they are likely to influence the attitude of the respondent and in seeking his desired cooperation. The opening questions should be such as to arouse human interest. The following type of questions should generally avoid as opening questions in a questionnaire:

- Questions that put too great a strain on the memory or intellect of the respondent.
- Questions of a personal character.
- Questions related to personal wealth, etc.
Following the opening questions, we should have questions that are really vital to the research problem and a connecting thread should run through successive questions. Ideally, the question-sequence should conform to the respondent’s way of thinking. Knowing what information is desired, the researchers can rearrange the order of the questions (this is possible in case of unstructured questionnaire) to fit the discussion in each particular case. But in a structured questionnaire the best that can be done is to determine the question-sequence with the help of a Pivot Survey which is likely to produce good rapport with most respondents. Relatively difficult questions must be relegated towards the end so that even if the respondent decides not to answer such questions, considerable information would have already been obtained. Thus, question-sequence should usually go from the general to the more specific and the researcher must always remember that the answer to a given question is a function not only the question itself, but of all previous questions as well. For instance, if one question deals with the price usually paid for coffee and the next with reason for preferring that particular brand, the answer to this later question may be couched largely in terms of price-differences.

c) Question formulation and wording:
With regard to this aspect of questionnaire, the researcher should note that each question must be very clear for any sort of misunderstanding can do irreparable harm to a survey. Question should also be impartial in order not to give a biased picture of the true state of affairs. Question should be constructed with a view to their forming a logical part of a well thought out tabulation plan. In general, all questions should meet the following standards- a) should be easily understood; b) should be simple i.e., should convey only one thought at a time; c) should be concrete and should confirm as much as possible to the respondent’s way of thinking. (For instance, instead of asking, “How many razor blades do you use annually?” The more realistic question would be to ask, “How many razor blades did you use last week?”)
Concerning the form of questions, we can talk about two principal forms, viz., multiple choice questions and the open-end question. In former the respondent selects one of the alternative possible answers put to him, whereas in the latter he has to supply the answer in his own words. The question with only two possible answers (usually ‘yes’ or ‘no’) can be taken as a special case of the multiple choice question, or can be named as a ‘closed question.’ There are some advantages or disadvantages of each possible form of question. Multiple choice or closed questions have the advantages of easy handling, simple to answer, quick and relatively inexpensive to analyse. They are most amenable to statistical analysis. Sometimes, the provision of alternative replies helps to make clear the meaning of the question. But the main drawback of fixed alternative questions is that of “putting answers in people’s mouths” i.e., they may force a statement of opinion on an issue about which the respondent does not infect having any opinion. They are not appropriate when the issue under consideration happens to be a complex one and also when the interest of the researcher is in the exploration of a process. in such situations, open-ended questions which are designed to permit a free response from the respondent rather than one limited to certain stated alternatives are considered appropriate. Such questions give the respondent considerable latitude in phrasing a reply. Getting the replies in respondent’s own words is, thus, the major advantage of open-ended questions. But one should not forget that, from an analytical point of view, open-ended questions are more difficult to handle, raising problems of interpretation, comparability and interviewer bias.”

In practice, one rarely comes across a case when one questionnaire relies on one form of questions alone. The various forms complement each other. As such questions of different forms are included in one single questionnaire. For instance, multiple-choice questions constitute the basis of a structured questionnaire, particularly in a mail survey. But even there, various open-ended questions are generally inserted to provide a more complete picture of the respondent’s feelings and attitudes.
Researcher must pay proper attention to the wordings of questions since reliable and meaningful returns depend on it to a large extent. Since words are likely to affect responses, they should be properly chosen. Simple words, which are familiar to all respondents should be employed. Words with ambiguous meanings must be avoided. Similarly, danger words, catch-words or words with emotional connotations should be avoided. Caution must also be exercised in the use of phrases which reflect upon the prestige of the respondent. Question wording, in no case, should bias the answer. In fact, question wording and formulation is an art and can only be learnt by practice.

Essentials of a good questionnaire:

To be successful, questionnaire should be comparatively short and simple i.e., the size of the questionnaire should be kept to the minimum. Questions should proceed in logical sequence moving from easy to more difficult questions. Personal and intimate questions should be left to the end. Technical terms and vague expressions capable of different interpretations should be avoided in a questionnaire. Questions may be dichotomous (yes or no answers), multiple choice (alternative answers listed) or open-ended. The latter types of questions are often difficult to analyse and hence should be avoided in a questionnaire to the extent possible. There should be some control questions in the questionnaire which indicate the reliability of the respondent for instance, a question designed to determine the consumption of particular material may be asked first in terms of financial expenditure and later in terms of weight. The control questions, thus, introduced a cross check to see whether the information collected is correct or not. Questions affecting the sentiments of the respondents should be avoided. Adequate space for answers should be provided in the questionnaire to help editing and tabulation. There should always be provision for indications of uncertainty, e.g., “don’t know” “no preference” and so on. Brief directions with regards to filling up the questionnaire should invariably be given in the questionnaire itself. Finally, the
physical appearance of the questionnaire affects the cooperation the researcher receive from the recipients and as such an attractive looking questionnaire particularly in mail surveys, is a plus point for enlisting cooperation. The quality of the paper, along with its colour must be good so that it may attract the attention of recipients.

**Guidelines for Constructing Questionnaire:**

The researcher must pay attention to the following points in constructing an appropriate and effective questionnaire or a schedule:

- Researcher must keep in view the problem he/she is to study for it provides the starting point for developing the questionnaire or schedule. He/she must be clear about the various aspects of his/her research problem to be dealt with in the course of his/her research project.

- Appropriate form of questions depends on the nature of information sought, the sampled respondents and the kind of analysis intended. The researcher must decide whether to use closed or open ended question. Questions should be simple and must be constructed with a view forming a logical part of a well thought out tabulation plan. The units of enumeration should also be defined precisely so that they can ensure accurate and full information.

- Rough draft of the questionnaire/schedule be prepared, giving due thought to the appropriate sequence of putting questions. Questionnaires or schedules previously drafted (if available) may as well be looked into at this stage.

- Researcher must invariably re-examine, and in case of need may revise the rough draft for a better one. Technical defects must be minutely scrutinised and removed.

- Pilot study should be undertaken for pre testing the questionnaire. The questionnaire may be edited in the light of the results of the pilot study.

- Questionnaire must contain simple but straight forward directions for the respondents so that they may not feel any difficulty in answering the questions.
A number of questions are asked to various employees to various departments. It includes executive and non-executive. The questionnaire is as follows:

1) Do you think, compensation is the only way that helps in boosting the morale and motivating the employee?
   a) yes       b) no       c) can’t say

Findings: During the study it was found that 70% employees said good salary is not the only way that helps in boosting the morale of the employees. Just 25% vote in favoured of this.

Suggestions: As 70% employees said good salary is not the only way to boost the morale and motivate the employees, apart from giving better salary management need to add other facilities to have a well mentioned group of employees.

2) Is the salary being given to you satisfactory?
   a) Satisfactory   b) Not-satisfactory   c) highly satisfactory

Findings: 68% of employees are satisfied with their salary. 20% for employees are partly dissatisfied and 12% are totally unsatisfied.

Suggestions: It shows that 32% of employees are really a matter of concern for the company. So, management need to treat them right at this moment, otherwise it will hamper the productivity.

3) What’s about compensatory system is it employee fevered or employer fevered?
   a) Employee favoured   b) employer favoured   c) can’t say

Findings: 65% replied, it is both employer and employees favoured. 20% says it is employer favoured, 10% said it is employee favoured, while 5% could not answer any thing.

Suggestions: No suggestion
4) Have you thought of leaving the company, in case company refuses to hike the salary in future?
   a) Yes   b) No   c) Not yet thought

Findings: 59% of employees given their nod to switch over to other company while 32% replied to keep patient.

Suggestion: As majority of employees needs better salary in future. Management need to hike it periodically.

5) Whether salary is paid in the right time?
   a) Yes   b) No

Findings: 75% employees said that salary is paid in the right time.

Suggestion: As 25% employees said that salary is not paid in the right time. Company should pay the salary on the right time to make employees satisfied.

6) Is your salary being cut down when you take a leave?
   a) Yes   b) No   c) Depending upon the number of days

Findings: 85% of employees said, it is not being cut down. 15% replied depending upon the time and period of leave it is decided.

Suggestion: Apart from the legal leave, company need to give leave those who need desperately without cutting down the salary.

7) Looking at the P.F and pension, do you feel your future is secure?
   a) Yes   b) No   c) Can’t say

Findings: 63% say yes, 19% No, 11% partly, 7% cant say

Suggestion: 63% says their future is secured, company need to keep their faith in future.
8) Taking into consideration of your experience and expertise, do you feel that had you been joined another company in the industry, you would have get more salary than the present one?
   a) More       b) Comparatively more       c) Not really       d) Don’t know

Findings: 21% said more, 25% said comparatively more, 25% said not really, 25% could not say.

Suggestion: Employees should be paid according to their performance and expertise and these things should be communicated to them.

9) Should the concept of flexi timing be introduced in company?
   a) At the emergency case   b) every time   c) No, not at all

Findings: 56% replied they want to work according to their own time. 30% want to work in a particular time everyday. 14% said it should be given at the time of emergency.

Suggestion: As flexi timing is a new concept in the industry and it enhances productivity and boost the moral of working. It should be introduced carefully.

10) Is there any impact of global slowdown on your job?
    a) Not really   b) A little bit   c) Can’t say

Findings: 90% said against this and 10% could not be able to answer about this.

Suggestion: It has been found in the study that there has been no impact of global recession on the company.

11) In case some one didn’t perform up to the expectation company reduced its salary. How would you look into this issue?
    a) Company did the right thing   b) It should not have done
**Findings:** Majority of employees said company should not cut down the salary. They told quoted as “we are performing better now, in future if we do not perform our salary will be cut down, this is not be fair”.

**Suggestion:** Company should give time and chance to the employees to perform better in the future.

### 2.5) SECONDARY BOOKS AND RESEARCH SOURCES

Secondary data means data that are already available i.e., they refer to the data which have already been collected and analysed by someone else. When the researcher utilises secondary data, then he has to look into various sources from where he can obtain them. In this case he is certainly not confronted with the problems that are usually associated with the collection of original data. Secondary data may either be published data or unpublished data.

*Usually published data are available in:*
- Various publications of the central, state or local governments.
- Various publications of foreign governments or of international bodies and their subsidiary organisations.
- Technical and trade journals.
- Books, magazines and newspapers.
- Reports and publications of various associations connected with business and industry, banks, stock exchanges etc.
- Reports prepared by research scholars, universities, economists, etc. In different fields.
- Public records and statistics, historical documents and other sources of published information.

*The sources of unpublished data are many;* they may be found in diaries, letters, unpublished biographies and autobiographies and also may be available with
scholars and research workers, trade associations, labour bureaus and other public or private individuals and organisations.

Researchers must be very careful in using secondary data. He must make a minute scrutiny because it is just possible that the secondary data may be unsuitable or may be inadequate in the context of the problem which the researcher wants to study. In this connection Dr. A. L. Bowley very aptly observes that it is never safe to take published statistics at their face value without knowing their meaning and limitations and it is always necessary to criticise arguments that can be based on them.

By way of caution, the researcher, before using secondary data, must see that they possess following characteristics:

➢ Reliability of data:

The reliability can be tested by finding out such things about the side data.

✓ Who collected the data?
✓ What were the sources of data?
✓ Where they collected by using proper methods?
✓ At what time were they collected?
✓ Was there any bias of the compiler?
✓ What level of accuracy was desired?
✓ What is achieved?

➢ Suitability of data:

The data that are suitable for one enquiry may not necessarily be found suitable in another inquiry. Hence, if the available data are found to be unsuitable, they should not be used by the researcher. In this context, the researcher must very carefully scrutinise the definition of various terms and units of collection used at the time of collecting the data from the primary source originally. Similarly, the object, scope and nature of the original inquiry must also be studied. If the researcher finds differences in these, the data will remain unsuitable for the present inquiry and should not be used.
➢ Adequacy of data:

If the level of accuracy achieved in data is found in adequate for the purpose of the present inquiry, they will be considered as inadequate and should not be used by the researchers. The data will also be considered inadequate, if they are related to an area which may be either narrower or wider than the area of the present enquiry. From all this we can say that it is very risky to use the already available data. The already available data should be used by the researcher only when he finds them reliable, suitable and adequate. But he should not blindly discard the use of such data if they are readily available from authentic sources and are also suitable and adequate for in that case it will not be economical to of spend time and energy in field surveys for collecting information. At times, there may be wealth of usable information in the already available data which must be used by an intelligent researcher but with due precaution.

☞ Selection of Appropriate Method for Data Collection:

Thus, there are various methods of data collection. As such the researcher must judiciously select the method / methods for his own study, keeping in view the following factors:

➢ Nature, scope and object of enquiry:

This constitutes the most important factor affecting the choice of a particular method. The method selected should be such that it suits the type of enquiry that is to be conducted by the researcher. This factor is also important in deciding whether the data already available (Secondary data) are to be used or the data yet not available (primary data) are to be collected.

➢ Availability of funds:

Availability of funds for the research project determines to a large extent the method to be used for the collection of data. When funds at the disposal of the researcher are very limited, he will have to select a comparatively cheaper method
which may not be as efficient and effective as some other costly method. Finance, in fact, is a big constraint in practice and the researcher has to act within this limitation.

➢ Time factor:

Availability of time has also to be taken into account in deciding a particular method of data collection. Some methods take relatively more time, whereas with others the data can be collected in a comparatively shorter duration. The time at the disposal of the researcher, thus, affects the selection of the method by which the data are to collect.

➢ Precision required:

Precision required is yet another important factor to be considered at the time of selecting the method of collection of data.

But one must always remember that each method of data collection has its uses and none is superior in all situations. For instance, telephone interview method may be considered appropriate (assuming telephone population) if funds are restricted, time is also restricted and the data is to be collected in respect of few items with or without a certain degree of precision. In case funds permit and more information is desired, personal interview method may be said to relatively better. In case time is ample, funds are limited and much information is to be gathered with no precision, then mail-questionnaire method can be regarded more reasonable. When funds are ample, time is also ample and much information with no precision is to be collected, then either personal interview or the mail-questionnaire or the joint use of these two methods may be taken as an appropriate method of collecting data. Where a wide geographical area is to be covered, the use of mail-questionnaires supplemented by personal interviews will yield more reliable results per rupee spent than either method alone. The secondary data may be used in case the researcher finds them reliable, adequate and appropriate for his research. While studying motivating influences in market researches or studying people’s attitudes in psychological/social surveys, we can resort to the use of one or more of the projective techniques. Such
techniques are of immense value in case the reason is obtainable from the respondent who knows the reason but does not want to admit it or the reason relates to some underlying psychological attitude and the respondent is not aware of it. But when the respondent knows the reason and can tell the same if asked, than a non-projective questionnaire, using direct questions, may yield satisfactory results even in case of attitude surveys. Since projective techniques are as yet in an early stage of development and with the validity of many of them remaining an open question, it is usually considered better to rely on the straightforward statistical methods with only supplementary use of projective techniques. Nevertheless, in pre-testing and in searching for hypotheses they can be highly valuable.

Thus, the most desirable approach with regard to the selection of the method depends on the nature of the particular problem and on the time and resources (money and personnel) available along with the desired degree of accuracy. But, over and above all this, much depends upon the ability and experience of the researcher. Dr. A.L. Bowley’s remark in this context is very appropriate when he says that “in collection of statistical data common sense is the chief requisite and experience is the chief teacher”.

The secondary data was collected from already published sources such as pamphlets, annual reports, various journals and internal records. The data collection includes:
- Collection of required data from annual report.
- Reference from text books and journals relating to the paper industry in India.
- Annual reports of the company.

**Meaning of Annual Report:**
An annual report is a comprehensive report on a company's activities throughout the preceding year. Annual reports are intended to give shareholders and other interested people information about the company's activities and financial performance. Most jurisdictions require companies to prepare and disclose annual
reports, and many require the annual report to be filed at the company's registry. Companies listed on a stock exchange are also required to report at more frequent intervals (depending upon the rules of the stock exchange involved).

Typical annual reports will include:

- Accounting policies
- Balance sheet
- Cash flow statement
- Contents: non-audited information
- Profit and loss account
- Notes to the financial statements
- Chairpersons statement
- Directors' Report
- Operating and financial review
- Other features
- Auditors report

Other information deemed relevant to stakeholders may be included, such as a report on operations for manufacturing firms or corporate social responsibility reports for companies with environmentally or socially sensitive operations. In the case of larger companies, it is usually a sleek, colorful, high-gloss publication. The details provided in the report are of use to investors to understand the company's financial position and future direction. The financial statements are usually compiled in compliance with IFRS and/or the domestic GAAP, as well as domestic legislation (e.g. the SOX in the U.S.).

**Meaning of Journal:**

A journal means a daily record of events or business; a private journal is usually referred to as a diary. A journal is a book or computer file in which monetary
transactions are entered the first time they are processed. This journal lists transactions in chronological sequence by date prior to a transfer of the same transactions to a ledger in the process of bookkeeping.

**Meaning of pamphlets:**

A pamphlet is an unbound booklet (that is, without a hard cover or binding). It may consist of a single sheet of paper that is printed on both sides and folded in half, in thirds, or in fourths (called a leaflet), or it may consist of a few pages that are folded in half and saddle stapled at the crease to make a simple book. In order to count as a pamphlet, UNESCO requires a publication (other than a periodical) to have "at least 5 but not more than 48 pages exclusive of the cover pages"; a longer item is a book.

### 2.6) CURRENT ANALYSIS OF ORIENT PAPPER MILLS - AMLAI

Various methods of analysis are conducted to measure the Performance appraisal of orient paper mills, Amlai. It includes personal interviews, questionnaires, sampling techniques etc. For such a big unit to measure performance appraisal one single method is not appropriate. So, many other methods or measures are also undertaken.

**TABLE: Performance Analysis**

**Antecedent:**

1. Does the employee know what is expected?
   Are the standards clear?
   Have they been communicated?

**Behaviour:**

2. Can the behaviour be performed?
   Could the employee do it if his or her life depends upon it?
   Does something prevent it occurrence?
Consequences:

3. Are the consequence weighted in favour of performance?

4. Is there feedback about the consequences in relation to job performance?
   If yes, is the feedback immediate, specific, and positive?

5. Are improvements being reinforced?
   Do we note improvements even though the improvement may still leave the employee below company standards?
   Is reinforcement specific?