TECHNICAL REPORT WRITING

Definition:

Technical writing is a specialized, structured way of writing, where information is presented in a format and manner that best suits the psychological needs of the readers, so that they can respond to a document as its author intended and achieve the purpose related to that document.

The process of gathering information from experts and presenting it to an audience in a clear, easily understandable form is called *technical writing*.

Technical writing is the presentation of information that helps the reader to solve a particular problem. Technical communicators write, design and/or edit proposal, web pages, lab reports, newsletters and many other kinds of professional documents.

Purpose of Writing a Report:

Technical report writing has two basic purposes:
1. To inform
2. To persuade/convince

A technical report can be used for the physical description of a new machine, the steps in a particular process, or the results of an experiment.

For example: A writer not only describes two sites for a factory, but also persuades readers to accept one of them as the best i.e. to prove his/her point. A document that achieves these purposes is called a technical report.

Elements Necessary for an Effective Report Writing:

1. Clarity: There should be no ambiguity. Everything should be presented in a clearly understandable form.

2. Accuracy: All points should be accurately mentioned.

3. Comprehensiveness: easily understandable.

4. Accessibility: the ease with which the readers can locate the information they seek. To increase accessibility, include headings and lists in the report. A table of contents, list of illustrations, glossary and index are preferred.

5. Conciseness/precision: Stick to the basic point.

6. Correctness: Ensure accuracy of report format, grammar, language, punctuation and vocabulary.

7. Relevancy: Only include the material which is actually needed and required for the reader.

8. Objectivity: free from any biased or personal feelings. This can be achieved by:
   i.   Making a distinction between fact and opinion.
   ii.   Reporting all pertinent information.
   iii.   Using a bias free language. No personal terms to be included, such as amazing, wonderful, tremendous, terrific, etc.
   iv.   Impersonal style: Avoid a personal tone.

Functions of Technical Writing:

   a. Reassures recipients that you are making progress, that the project is going smoothly, and that it will be completed by the expected date.
   b. Provides their recipients with a brief look at some of the findings or some of the work of the project.
   c. Gives the recipients a chance to evaluate your work on the project and to request changes.
   d. Gives you a chance to discuss problems in the project and thus to forewarn recipients.
   e. Forces you to establish a work schedule so that you'll complete the project on time. It gives the writer a motivation to work more and produce results more efficiently.
   f. Also recognizes and defines a problem like what and why, selects a method of solution, collects and organizes data and arrives at a conclusion.

Advantages:

   • Helps in solving problems.
   • Informs management about progress and shortcomings.
   • Helps companies in decision making.
   • Reports are the basis for major policy changes based on findings and recommendations.
   • Provides well formulated basis for launching important schemes and projects.
   • Serves as a permanent record of information.

Classification:

Depending upon the nature of the report, each report can be classified into the following categories:

   1. **Authorized (solicited) or Voluntary (unsolicited):** Sometimes a report is written by a junior on being asked by a senior, while sometimes it is produced by the junior on his/her own when not asked for.
   2. **Routine or Specialized:** Some reports are prepared on a regular basis and some are on special occasions, such as a feasibility report which requires a heavy investment.

3. **Internal or External:** Reports are written to be sent within the department and even within the firm, while some are to be sent to the outsiders, such as buyers, suppliers, press, or even government.
4. **Short or Long:** Short reports are usually routine and written in the form of a memo or letter format, while long reports are usually written as a manuscript. A long report can be of 10 to 100 pages in length, while short reports cannot be more than 5 to 10 pages of length. The difference also depends on the subject matter, purpose, format, structure and the reader's need.
5. **Informational or Analytical:** Informational reports provide data, facts, feedback, and other types of information without analysis or recommendation, where information is presented in a logical and concise format for being accessible to the reader. Such reports provide a solid foundation for a wide range of managerial decisions. Analytical reports, on the other hand, provide information and analysis of a situation or problem. All analytical reports do not contain recommendations as some end on the conclusion only. These reports are written when there is some problem, for which collection of information is done, followed by analyzing the issue objectively, drawing a sound conclusion, and presenting the recommendations for the readers.

Types of Informational Reports:

1. **Conference reports:** A conference is a prearranged meeting for consultation or exchange of information or discussion, especially one with a formal agenda. The purpose of this report is to record all the proceedings, discussions, and decisions and inform those who were not at the meeting. These are organized by topics discussed in a chronological progression for an easy and quick understanding. For example, write ups or minutes of meetings between the company and the client.
2. **Reports for documenting progress/Progress reports:** The purpose of such a report is to show progress over time. There are two types of such reports – interim (provisional) and final (the last one). For example, a building project of twelve months may have 11 interim and one final report.
3. **Reports for monitoring and controlling operations:** These are prepared for monitoring and controlling purposes. These reports highlight business achievements, target meeting, and expose problems. For example, a daily sales or wastage report.
4. **Reports for implementing policies and procedures:** These reports are written to communicate the company's standards and policies to all the employees, and guide them how to implement a policy step by step. There are two types: one-time policy papers for implementing a policy once only, and lasting guidelines known as manuals. For example, the hiring procedure for an employee is documented in the human resource department's manual.
5. **Reports for complying with government regulations:** Every organization is controlled by a government supervisory body, which requires reporting on a regular basis to judge an organization's compliance level. Such reports explain the company's conformance to the government's rules and regulations, which are mostly produced in pre-printed

formats, provided by the government regulators, for example, an annual compliance report or tax returns, etc.

Types of Analytical Reports:
1. **Problem solving reports:** These are written to provide background information, analysis of options, conclusion, and recommendations for the reader to make necessary decisions. For example, troubleshooting, feasibility and justification reports.
2. **Proposals:** It is a special type of an analytical report, which is written to get products, plans or projects accepted by others. Proposals can be classified in two ways:

   - **Target audience:** either internal (for other staff) or external (for other organizations)
   - **Source:** either solicited (involuntary/authorized) or unsolicited (voluntary/unauthorized)