

Technical Report Writing: BITS F112

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Technical Reports

- Definition
- Characteristics
- Types
- Importance

Report: Definition

- The word “report” is derived from the Latin “reportare” meaning “to bring back”.
- A report is a conventionally presented and formally written communication with a specific purpose and specific audience; it includes a description of procedures followed for collection and analysis of data, their significance, the conclusions drawn from them and recommendations, if required.

Objectives of a Report

- To present a record of accomplished work
- To record an experiment
- To record research findings or technical specifications
- To document schedules, timetables and milestones
- To record and clarify complex information for future reference
- To recommend actions for solving certain problems.

Characteristics of a Report

- Formal elements like precision and factual details
- Presented in a conventional form in order to inform, persuade or to recommend
- Includes information about the procedure of data collection and significance of such data
- Contains conclusions
- Contains recommendations if required

Effective Report Writing

- A typical report is:
 - Precise and Brief
 - Factual
 - Relevant
 - Reader-oriented
 - Objective and accurate

Differences between Report writing & Literary writing:

Literary Writing	Report Writing
<ul style="list-style-type: none">•Subjective•Driven by feelings•Vague objectives•Imaginary world•Urged by inner feelings•No criterion•Style(abstract)•No structure	<ul style="list-style-type: none">•Objective•Driven by facts•Specific purpose•Real world•Urged by circumstances•Data based•Objective, plain•Specific structure

Importance of Reports:

Why do we write Reports?

- Helps in planning new ventures
- Evaluates employees & materials
- Helps in decision-making and problem solving
- Disseminates information within and outside organization
- Serves as a measure of growth, progress or success of an organization

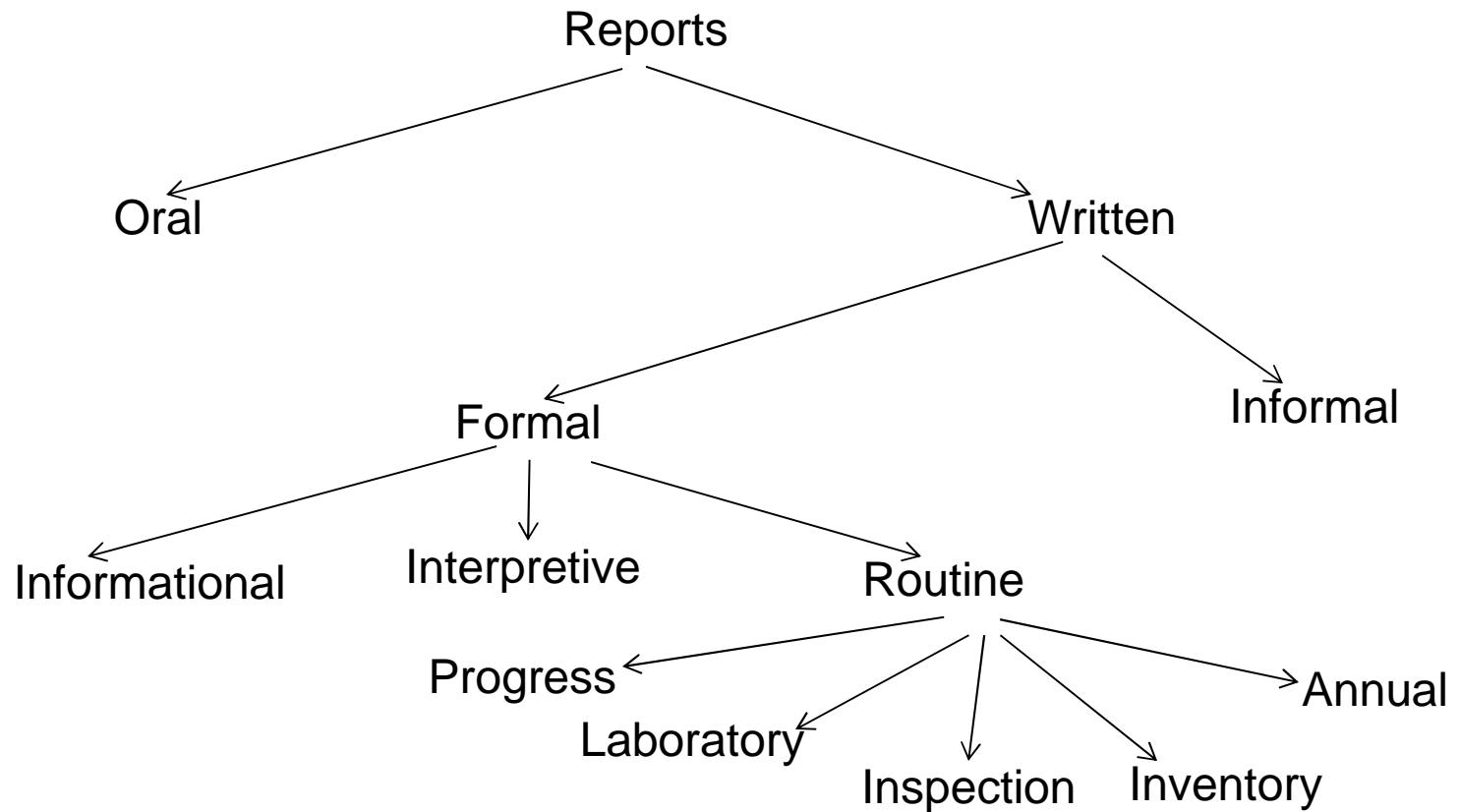
Importance of Reports (contd...)

- Improves production and distribution within an organization
- Helps in planning procedures and logical presentation of ideas and information
- Reveals gaps in reasoning
- Helps in establishing a valuable repository of information

A Report must explain...

- What we did?
- Why we did it?
- What was discovered?
- What is the significance of the said report?
- How we did it?
- Must clearly establish/identify what is new about the work.
- And how it is related to prior work/knowledge?

Report types:



Comparing Oral Report and Written Report:

Oral Report

- Face to face communication
- Easy for speaker
- Informal
- Ephemeral

Written

- Written communication
- Easy for reader
- Formal
- Permanent record

Informational or Informative Report

- As presentation of information is the basic purpose, details are worked out in a systematic and coherent manner in such a report.
- Information is presented in an objective, factual and organized manner.
- Supporting data, appropriate order and good presentation style are important for writing such a report.

Interpretative or Analytical Report

- It analyses the facts, draws conclusions and makes recommendations.
- The steps observed in such a report are:
 1. Drafting problem statement
 2. Evolving criteria
 3. Suggesting alternatives and evaluation
 4. Drawing conclusions and making recommendations

Reports (contd..)

<u>Informational Report</u>	<u>Interpretive Report</u>
<ul style="list-style-type: none">□ Presents situation as it is□ Contains no conclusions or recommendations□ Important in decision making	<ul style="list-style-type: none">□ Contains facts plus evaluation or analysis or interpretation of data□ Reporter's□ Recommendations for action

Routine or Periodic Report

- It is prepared and presented at regular, prescribed intervals and hence is called a routine report.
- It may be submitted annually, semi-annually, quarterly, monthly, weekly or even daily.
- Generally, such a report contains a mere statement of facts in detail, in summarized form, or in the layout of a prescribed form, without an opinion or recommendation.

Routine Reports: Types

- ❑ Progress
- ❑ Laboratory
- ❑ Inspection
- ❑ Inventory
- ❑ Annual Confidential

Progress Report

- When a long-term project or work is undertaken, the administration keeps itself informed through progress reports.
- It helps the workers immediately responsible for the job to take stock of the situation.
- The frequency of a progress report depends on the organization.
- If it is prepared at regular intervals, it is called a periodic report.

Laboratory Report

- An account of various steps, findings & conclusions put together in a logical order
 - To choose the right equipment
 - To arrange various instruments appropriately
 - To observe & record process, reactions and readings faithfully and accurately
 - To arrive at valid conclusions
- For scientific investigation or experimentation
- Experiments
 - To test a theory
 - To verify the modification
 - To examine the validity of findings

Inspection Reports

- Inquires about the proper functioning of equipments (routine way or complaint-basis)
- Inspects to see that it fulfils the required specifications (quality control)

Inventory Reports

- To take stock of equipment, furniture, stationery,etc. at regular intervals

Annual Confidential Report

- It reflects the periodic evaluation of the performance & general good conduct of the employees.
- This information is used at appropriate times for rewards such as increments, promotion, transfer to more responsible jobs, etc.
- It may stick to a routine fashion.
- The qualities required for doing a particular job efficiently are listed in a form and the officer has to tick a particular item to indicate the level of efficiency of the employee.

Utility of a report

- A report is a professional' s only tangible product.
- It presents his/her investigation, testing and experimentation. If his/her efforts are to count in the judgment of the superiors, he/she must describe clearly what he/she has done. He/She must show the significance of his/her work. And often the engineer' s written report is his/her only contact with the management.



THANK YOU