
Report Writing: Types, format and structure of technical reports

Introduction

We see many examples of reporting in daily life.

- ❖ A nurse reports to the doctor
- ❖ A supervisor, at the end of the day, reports to the manager
- ❖ The manager of a bank sends a periodic report to the head office

What is a report?

A report is an account of or a statement about something that happened in the past.

- Origin-Latin-reportare (re-back, portare-to carry (to carry back))
- **A piece of factual writing, based on evidence, containing organized information and/or analysis of a particular topic.**
- Transmits certain **facts, ideas, or suggestions** useful for another person through a report.
- It can also be the **description of an event or a condition.**

Importance of Reports

- ▶ A basic **management tool** used in **decision-making and problem solving**. Executives base their decisions on the reports.
- ▶ Reports help the authorities in **planning new ventures** and in **evaluating men and material**.
- ▶ Reports serve as a measure of the **growth, progress, or success** of an organization.
- ▶ Reports serve as a valuable **repository of information**.

Objectives of Reports

Some important purposes of reports are to:

- Present a record of accomplished work (**project report**)
- Record an experiment (**primary research report/laboratory report**)
- Document schedules, timetables, and milestones (a **status report** on a long-term plan)
- Document current status (**an inspection report**)
- Present information to a large number of people (**annual report**)
- Recommend actions that can be considered in solving certain problems (**recommendatory report**)

Types of Technical Reports

On the basis of purpose, frequency, mode of reporting, length, approach, and target audience, reports can be classified as follows:

- ▶ **Informative, analytical (purpose)**
- ▶ **Periodic, special (frequency)**
- ▶ **Oral, written (mode of presentation)**
- ▶ **Long, short (length)**
- ▶ **Formal, informal (approach)**
- ▶ **Individual, group (target audience)**

Informative Reports

- ▶ An informative report, as the name suggests, entails provision of all details and facts pertaining to the problem.
- ▶ To trace the **growth of Company X** in the automobile industry.
 - ▶ **Introduction**
 - ▶ **Information or facts**
 - ▶ **Conclusion**
 - ▶ **Recommendations do not arise in this type of report.**
- ▶ **Purpose-** to present the information in an objective, factual, and organized manner.

Analytical Reports

- ▶ Also known as an **interpretative or investigative** report.
 - ▶ **Analyses the facts**
 - ▶ **Draws conclusions**
 - ▶ **Makes recommendations.**
- ▶ For instance, a report presenting production figures for a particular period is informative. But if it **analyses the causes of lower production in that period**, it becomes analytical, interpretative, or investigative.
- ▶ **Stages: a proper identification of the problem, analysis, and subsequent interpretation. Recommendations or suggestions are then incorporated in the report.**

Periodic Reports

Periodic reports are either **informational or analytical** in their purpose.

- ▶ Prepared and presented at regular, prescribed intervals: **routine reports**.
- ▶ Submitted **annually, semi-annually, quarterly, monthly, fortnightly, weekly, or even daily**.
- ▶ Routine reports can be analytical or interpretative.
e.g. **Annual assessment reports of employees** to the higher authorities.
(assess the data and give their recommendations)

Special Report

Related to a **single occasion or situation**.

- ▶ A report on the **feasibility of opening a new branch**, a report on the **unrest among staff** in a particular branch, or a report on the causes behind the **recent fire incidents in a factory** are special reports.
- ▶ Special reports deal with **non-recurrent problems**.

Oral and Written Reports

Depending upon the mode of presentation: oral or written

- ▶ When you rejoin duty after attending an international seminar, you meet your officer and report about the deliberations of the seminar: **oral reporting**.
- ▶ An oral report is **simple and easy** to present. It may communicate an impression or an observation.
- ▶ **Written reports** are always **preferred** as they enjoy several advantages over the oral ones.

Oral and written reports

Oral reports

- Immediate feedback is possible
- Do not add to the permanent records of the organization as the information/facts can be denied
- Audience needs to comprehend quickly as and when these are presented
- May be encumbered with irrelevant facts and overlook important ones
- Cannot be referred to again and again
- Have less professional value

Written reports

- Immediate feedback is not possible
- Contribute to the permanent records of the organization
- Audience can ponder over these reports and understand at its own pace
- Are more accurate and precise as the writer will be careful in putting down the facts in writing
- Can be edited, reviewed, stored, and retrieved
- Have more professional value

Short Reports

Long and short reports are classified based on length.

- ▶ Short reports are suitable as they are **precise and concise**. Their structure is not very elaborate and the focus is not on format as well.
- ▶ Sometimes the format is provided by the organization.
- ▶ Short reports include **memo** and **letter reports**.

Introduction, Information and conclusion

However, the format may vary depending on the situation.

Long Reports

- ▶ **Emphasis on the format.**
- ▶ **Elaborate structure and consists of abundant information.**
- ▶ **Properly organized and analysed.**
- ▶ **Produced after detailed research and data collection.**
- ▶ **These can be further classified as informative, analytical, and recommendatory reports.**
- ▶ **A lot of illustrations to support the discussion.**

Formal and Informal Reports

A formal report: result of proper survey and investigation.

- **Presented in a prescribed format.**
- **Prepared as per the requirement of the organization.**
- **Formal language**
- **All the elements & follow the laid down rules of writing reports.**
- **The length: a few pages to large volume.**

(annual reports, auditor's reports, policy reports, interpretive reports)

An informal report: transmitted from person to person.

- **A few lines to several pages.**
- **Targeted at a few people.**
- **(The memo report)**

Individual and Group Reports

When a report is classified based on the target audience, it is classified as individual and group report.

Group report:

- Present the government expenditure of the entire year
- The admission pattern in the engineering college

Individual report:

- Not meant for the general reader.
- The attendance report of an employee or an individual's progress report.

FORMATS

A report may have any one of the following formats:

- ▶ **Manuscript**
- ▶ **Letter**
- ▶ **Memo**
- ▶ **Pre-printed form**

Manuscript format

Commonly used format/used for formal reports.

- ▶ **The length:** can range from a few pages to several hundred.
- ▶ Can be **used for all types of reports**—informational, analytical, or routine, etc.,.)
- ▶ Include **more elements:** abstract, summary, appendix, glossary, and so on.

Memo format

Sent to somebody within the organization will be in a memo format.

- ▶ The **analysis, conclusions, and recommendations** are included in the main text part of the memorandum.
- ▶ Written on the **letterhead**
- ▶ **Inside address or salutations are not required.**
- ▶ The main body of the memo report includes **headings** appropriate to the discussed matter.
- ▶ Sometimes the memo report is signed or initialled at the end.
- ▶ Most organizations have a **printed format** for memos

Sample memo report

**MODERN INSTITUTE OF TECHNOLOGY
JAIPUR (RAJASTHAN)**

INTEROFFICE MEMORANDUM

To: Dean, Students Welfare Division
From: Chief Warden
Date: 15 October 2014
Subject: Negative effects of Internet facilities

Please refer to your letter No. SWD/IM/2003 in which you have asked me to study the negative effects of Internet facilities provided by the Institute. I would like to present my findings and recommendations.

Findings

The data for the report was collected by interviews with wardens, Mess Managers and the Chief of Information Processing Centre. Also, the medical records of the students were collected from the office of the Chief Medical Officer.

Physical Problems

A preliminary look into the medical records shows that about 75% of the students owning a computer and regular users of the IPC have complained about some physical problem or the other during the past one year. Dr R.K. Sen, Chief Medical Officer, told me that these were the symptoms of Carpal Tunnel Syndrome (CTS), a deadly disease that affects many computer users all over the globe. He also explained that these were due to excessive time spent in front of the computer, improper sitting posture, and the lack of physical exercise amongst the students. Also lack of proper sleep is a cause of this fast growing disease.

Academic Performance

Another disturbing trend has been the decline in academic standards of the student. Most of the wardens and teachers have complained about the declining academic output of the students since the facility was provided to the students. From the talks with Dr T. Bansal, Chief, IPC, I have concluded that most of the students make improper use of the Internet facility. The most common use is for chatting and watching movies over the Web. Though listening to music is also attributed as a problem, one may say that music is good for the students as it has a soothing effect. This abuse of the facility hampers the mental development of the student. Many have got so hooked to it that they live in a virtual world and the only friends they have are chat friends. This is an alarming fact and the trend must be stopped from growing.

Food Habits

The food habits of the students have also been a cause of concern lately. Most Mess Managers agree that the attendance for meals has gone down considerably since the last year, after the introduction of the computer centre. Also, the growing use of junk food by the students is a cause of concern, according to Dr Sen.

Recommendations

Given below are a few suggestions which may help in tackling the problem in question:

- The amount of time spent by a student in the computer lab should be fixed to no more than 4 hours. This can be easily implemented according to the IPC Chief.
- Undesirable sites should be blocked.
- Awareness should be raised among students about CTS and also how to prevent it.
- Considering Dr Sen's advice, chairs in the computer centre should be changed to specially designed ones for more comfort.
- Student participation in sports and cultural activities must be encouraged to shift their attention from computers.
- The computer lab must be shut down between 12 PM and 9 AM to give students proper rest.

I hope that this report will give you an insight into the nature of the problem and also its possible solutions. I would be glad to provide any clarification or additional information required in this regard.

**Amit Goyal
Chief Warden**

Letter format

Sending short reports of a few pages to outsiders

- ▶ Besides all the routine parts of a letter, these reports may include **headings, illustrations, and footnotes.**
- ▶ One of the most **personalized forms of reports**
(depends upon the relationship between the writer and the audience)

Sample letter report



SINLEY DISTRIBUTING COMPANY

3204 Jawaharlal Marg, New Delhi

Mr S.S. Moondra

September 27, 2014

Akshay Supermarket

Vidya Vihar

Pilani, Rajasthan

Dear Mr Moondra:

Subject: Advantages of Fully Stocked Shelves

As inquiries are increasing from several supermarket executives concerning grocery and drug shelf stocking, I have undertaken an investigation to determine the effect of fully stocked shelves on sales. This survey has been made considering representative grocery and drug products, with attention given to percentage increases through mass stocking.

Effect of Diversification

Seven supermarkets were surveyed, with several brands of products checked for a two-week period under normal shelf-stocking conditions, and then for two more weeks under fully stocked shelf conditions. Enclosed is the complete result of the survey: below is a simple breakdown:

Table 1: Sales in Relation to Number of Items Stocked

	On Total Grocery Product Sales	On Total Drug Sales	On All Products
Number of items checked	128	69	197
2 weeks' unit sales under normal conditions	8,404	607	9,011
2 weeks' unit sales when shelves were kept fully stocked	10,287	902	11,189
Change in percentage	+22.4%	+48.5%	+24.2%

If you notice the change in the percentage of sales resulting from fully stocking the shelves, it is obvious that this procedure is of tremendous value:

Grocery product sales 22.4 per cent increase

Drug product sales 48.5 per cent increase

All products sales 24.2 per cent increase

Margin and Turnover

We all know that it is the desire of every supermarket to offer goods at the lowest possible prices. This can be accomplished only by reducing markup and increasing stock turnover. Now, if you can increase sales on all products by 24.2 per cent merely by fully stocking your shelves, it is apparent that you will be able to reduce markups and offer merchandise at lower prices. By your giving maximum exposure to different commodities, the consumer has the opportunity to see more and as a result is motivated to purchase something that would never have entered his mind if certain brands had not caught his eye.

The rise in the general standard of living has caused a proportional increase in the demand for service. By our very nature, we cannot offer personalized service; therefore, we must do the next best thing—give intensive exposure to a large variety of brands. That is, substitute displays and printed selling appeals of various manufacturers for personal selling. The consumer is still our livelihood, and the more he sees, the more he will buy.

Recommendations

I suggest that you keep your shelves fully stocked at all times to increase sales of merchandise. It has always been our policy to sell through our retailers, which has been brought to light by the survey.

Yours sincerely

M.K. Hingle

President

Pre-printed form

Reports containing routine matter and which are periodical in nature may be written in a form prescribed by the organization.

- ▶ All one needs to do is **to fill in the blanks** in a pre-printed form.
- ▶ For instance, a report informing **the condition of equipment** in a laboratory may be presented in a printed form wherein the reporter needs to fill in certain details against the details asked for.

Sample inspection report

EXCEL Technovation Pvt. Ltd Ph. No. 377919 Fax: 0141-37978 CUSTOMER CALL FEEDBACK REPORT					
Call Registration Number: _____			Date : _____		
Customer: _____					
Location: _____					
Sys. Model:	Sl.No.:	Peripheral/Add-on Model:	Sl. No.:		
Service Type	Warranty/AMC/IRB/ Chargeable/Others	Product	Home PC/Desktop/Server/ Sun/IBM/Datacomm/ SW/Peripheral/Others		
<i>Call Type</i>	Ins/CM/PM/Proj/Upj/Upg/Siteinsp/Others		Call Category	HW/SW	
Problem Reported: _____					
Event	Date	Time	Event	Date	Time
Call Reported			Start of Service		
Call Assigned			End of Service		
Travel Time			Engineer Hands on Time		
Action Taken: _____					
Call Status: <input type="checkbox"/> Closed <input type="checkbox"/> Pending for Spares <input type="checkbox"/> Pending for Customers <input type="checkbox"/> Pending for Others					
Part Replaced: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Under observation					
	Part Number	Part Description	Quantity	Part Serial No.	
Part Replaced					
Part Removed					
For Customer's Use: Please rate this call by ticking an option:					
<input type="checkbox"/> Extremely Dissatisfied <input type="checkbox"/> Dissatisfied <input type="checkbox"/> Neither Satisfied nor Dissatisfied <input type="checkbox"/> Satisfied <input type="checkbox"/> Extremely Satisfied					
Customer's Feedback: _____					
User Name : _____			Engineer Name : _____		
Email ID/Tel.No : _____					
Signature : _____			Signature : _____		
Date : _____			Date : _____		

STRUCTURE OF REPORTS (MANUSCRIPT FORMAT)

STRUCTURE OF REPORTS

It has three basic parts:

Front Matter- the preparatory part

Main Body

Back Matter- the supplementary part

FRONT MATTER

FRONT MATTER consists of the following parts:

- ▶ **Cover Page**- it includes the title of the report, authority to whom it is submitted, date and author's name
- ▶ **Frontispiece**- (optional) – any extra map, picture or drawing related to the topic of the report
- ▶ **Title Page**- similar to the cover page but also includes name and designation of the approving authority along with the title of the report, authority to whom it is submitted, date and author's name.
- ▶ **Copyright notice** –(optional) a written document written to secure one's original work.

FRONT MATTER

- ▶ **Certificate-** (optional) some project reports require a certificate to state that the work is original. It is generally given by the project supervisor.
- ▶ **Forwarding letter** –(optional) written by someone other than the author to introduce the author and the work.
- ▶ **Acknowledgements-** a thank you note written to give credit to all the people or organizations who have directly or indirectly helped in writing the report.
- ▶ **Preface-** an introduction written by the author to state the factors leading to the writing of the report, to highlight the various features of the report, its significance

FRONT MATTER

- ▶ **Table of contents**- includes the various topics and headings with their page numbers.
- ▶ **List of Illustrations**-(optional) it is a content list for all the illustrations that appear in the report like graphs, charts, maps, drawings with their page numbers.
- ▶ **Abstract**- a summary of the report, the essence of the entire report without any illustrations. Length is only 2-5 % of the report

MAIN BODY

The main text gives the details of the study.

- ▶ **Introduction-** includes the background of the report, purpose and scope of the report, basic principles and theories involved, methods of gathering data, brief outline of methodology, organization of various sections.
- ▶ **Discussion/ description/ methodology-** in this section information and data is presented, analysed and interpreted, it also includes description of method used with tables, charts etc.
- ▶ **Conclusion-** it includes logical inferences drawn or judgement formed on the basis of analysis done of data presented in discussion or description, or the findings of investigation.
- ▶ **Recommendation-** suggestion for future course of action, steps to solve the problem. It is preferably written in points or tabular form.

BACK MATTER

The supporting part

- ▶ **Appendices**-(optional) some extra information that is of relevance to the report but could not be fitted in the text.
- ▶ **References**- an alphabetical list of sources- books, magazines, newspapers, websites, interviews that are **quoted** for particular piece of information in the report.
- ▶ **Bibliography**- an alphabetical list of sources- books, magazines, newspapers, websites, interviews that have been **consulted** in writing the report (may or may not be quoted from).
- ▶ **Glossary**-(optional) list of technical words used in the report and their explanations
- ▶ **Index** -(optional) a quick guide for the reader to locate the topic and the sub-topic.