usually produced after detailed research and data collection. These can be further classified as informative, analytical, and recommendatory reports. Long reports also have a lot of illustrations to support the discussion.

### Formal and Informal Reports

The nature and format decide if the report is formal or informal. A formal report is the result of proper survey and investigation and is presented in a prescribed format. It is prepared as per the requirement of the organization. The language is also very formal. The formal reports have all the elements of reports and follow the laid down rules of writing reports. The length may vary from a few pages to large volume. These reports include annual reports, auditor's reports, policy reports, interpretive reports, etc.

An informal report is usually transmitted from person to person. It can vary from a few lines to several pages. Sometimes an informal report may include raw data that can be used at the time of need. It is generally targeted at a few people. The memo report is an example of an informal report.

### Individual and Group Reports

When a report is classified based on the target audience, it is classified as individual and group report. A report presents the information in an organized manner in the most usable form to the set of people. It may describe the series of event to the concerned people. For example, it may present the government expenditure of the entire year to all the citizens of the nation. Another report on the admission pattern in the engineering college can be presented to aspiring engineers and their parents. These two are the examples of group report.

However, some reports are of concern only to an individual and are not meant for the general reader. These include the attendance report of an employee or an individual's progress report. These reports are of more interest to the top authority than anyone else. These reports are called individual reports. The format and design of these two reports may not vary much, but for the individual report the formalities can be dispensed with, and a personal touch can be added.

In an organization the marketing head sends a group report showing next year's projections to all the other functional (line) heads, and the production line head sends an individual MIS report to another head of the organization. Thus, in the first case, one individual is sending his/her report to a group of individuals, whereas in the second case an individual is sending a report to only one individual.

## FORMATS

A report may have any one of the following formats:
- Manuscript
- Letter
- Memo
- Pre-printed form

**Manuscript format**    This is the most commonly used format for reports and is generally used for formal reports. The length of such reports can range from a few pages to several hundred. Further, the manuscript form can be used for all types of reports—informational, analytical, or routine. As the length increases, these reports include more elements such as abstract, summary, appendix, glossary, and so on. All the elements of a manuscript report are discussed in detail later in this chapter under the heading 'Structure of Reports'.

**Memo format**    A report 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, the other parts being the same as the inter-office memorandum discussed in Chapter 15. A memo report (Exhibit 13.1) is written on the letterhead of the organization. Inside address or salutations are not required. The main body of the memo report includes headings appropriate to the discussed matter. Although there is no complimentary close or signature, sometimes the memo report is signed or initialled at the end. Most organizations have a printed format for memos in which a memo report can be submitted.

## EXHIBIT 13.1 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**   While sending short reports of a few pages to outsiders, one can opt for a letter format. Besides all the routine parts of a letter, these reports may include headings, illustrations, and footnotes. The letter report is one of the most personalized forms of reports, but the degree to which it can be personalized depends upon the relationship between the writer and the audience, and the circumstances under which it is used. Exhibit 13.2 shows a sample letter report.

## EXHIBIT 13.2   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 (see the sample inspection report in Exhibit 13.3). For instance, a report presenting the performance assessment of an employee, an interim  report reflecting the progress of a project, or 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.

## EXHIBIT 13.3    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 | |
| *Call Type* | 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:      ☐ Closed          ☐ Pending for Spares      ☐ Pending for Customers
                  ☐ Pending for Others

Part Replaced:    ☐ Yes             ☐ No                      ☐ 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:

☐ Extremely Dissatisfied          ☐ Dissatisfied          ☐ Neither Satisfied nor Dissatisfied

☐ Satisfied                       ☐ Extremely Satisfied

Customer's Feedback: ———————————————————————————————
——————————————————————————————————————————————

| User Name : | Engineer Name  : |
|---|---|
| Email ID/Tel.No : | |
| Signature : | Signature : |
| Date : | Date : |

The decimal system uses whole numbers followed by decimal digits to show main sections and subsections. Thus, the digits to the right of the decimal show each successive step in the outline. The following is an example of this system:

1.0  First-level heading
    1.1  Second level, first part
    1.2  Second level, second part
        1.2.1  Third level, first part
        1.2.2  Third level, second part
            1.2.2.1  Fourth level, first part
            1.2.2.2  Fourth level, second part
2.0  First-level heading
    2.1  Second level, first part
    2.2  Second level, second part
    ....

## STRUCTURE OF REPORTS (MANUSCRIPT FORMAT)

Various elements combine together to structure a report, and knowing them will help us in writing better reports. Although twenty elements are listed after this discussion, all of them need not be used in a report. While some of them may be included in all reports, some may find a place only in reports that are to be published.

The elements of structure can be selected considering the following parameters: usefulness, terms of reference, and existing practice.

*Usefulness* refers to the need for including any particular element. For example, when you write an informational report, you do not require a section on recommendations.

*The terms of reference* (refer to the earlier section on prewriting in this chapter) specify the objectives of the report. These are limits that are set on what an official committee or report has been asked to do. If the terms of reference demand suggesting some measures for improving a situation, a section on recommendations should be included. Otherwise, we can end the report with a section on conclusions.

The elements that constitute a report are also determined by the *existing practice* in an organization in terms of producing reports. That is, if an organization does not require an abstract or summary for a report, these elements can be omitted.

The standard twenty elements of structure of a full-fledged report are as follows:

| Prefatory parts | Main text | Supplementary parts | Optional elements |
| --- | --- | --- | --- |
| Cover page | Introduction | Appendix/appendices | Frontispiece |
| Title page | Discussion | References/bibliography | Letter of transmittal |
| Certificate | Conclusions | Glossary | Copyright notice |
| Acknowledgements | Recommendations | | Preface |
| Table of contents | | | Summary |
| List of illustrations | | | Index |
| Abstract | | | |

### Prefatory Parts

Just as we catch the attention of our audience, introduce our topic, and give them a preview during the introductory part of our speech, the report writers use the prefatory parts of their report to get their audience ready for reading the report. They reveal the topic, author, contents and also introduce the objectives, results, significance very briefly in these parts. Now let us look into the various parts of the preliminary section of a report.
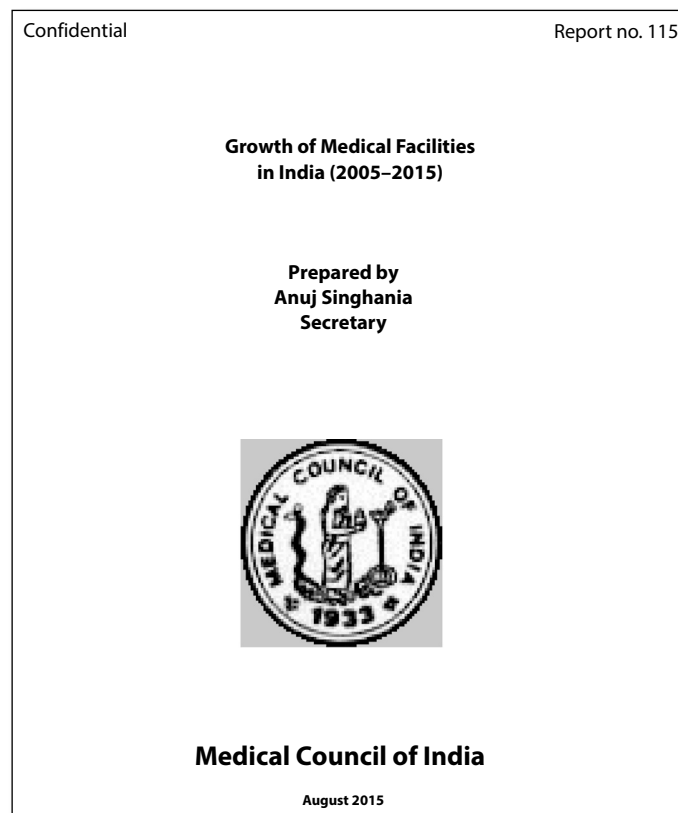
#### *Cover page and frontispiece*

The cover page of the report not only gives it an elegant appearance but also protects it from damage. It also serves as a quick reference to the readers to know the topic and the author of the report. The classification of the report (secret/top secret) and report number, if applicable, may also be mentioned on the cover page on the top left corner and right corner, respectively.

To stir the curiosity of the reader, one may superimpose on this cover page some illustrations, such as photographs, drawings, and diagrams, provided these illustrations reflect the contents of the report. For example, a report on 'Designing Webpages' can have a webpage superimposed on the cover. Any such illustration is known as the frontispiece, which is an optional element, and generally finds a place in reports that are published.

Many organizations have standard covers for reports, imprinted with the organization's name and logo, as shown in Exhibit 13.4.

#### EXHIBIT 13.4    Sample cover page



Confidential                                        Report no. 115

**Growth of Medical Facilities
in India (2005–2015)**

**Prepared by
Anuj Singhania
Secretary**

**Medical Council of India**

**August 2015**

*Title page*

The title page (Exhibit 13.5) is the first right-hand page of a report. This page is more or less similar to the cover page, except that it contains the following additional information:

- Name and designation of the intended audience
- Name and designation of the approving authority, if any. (In some organizations the report does not directly reach the recipient. It may require the approval of an intermediary before reaching the recipient.)

If needed, the organization's emblem can be included just above its name given at the bottom (similar to the cover page, as shown in Exhibit 13.4).

### EXHIBIT 13.5    Sample title page

Growth of Medical Facilities
In India (2005–2015)


Prepared For

Gautam Chaudhary
Director
Medical Council of India



by

Anuj Singhania
Secretary



Approved by
ABC


Medical Council of India
August 2015

### *Certificate*

Certain reports, such as project reports and research reports require a certificate vouching the original contribution of the report writer. Generally, the certificate (Exhibit 13.6) contains the statement testifying the original work, place, date, and signature of the project supervisor or guide.

### EXHIBIT 13.6    Sample certificate

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**Certificate**

This is to certify that the project entitled Growth of *Medical Facilities in India* (2005–2015) embodies the original work done by *Anuj Singhania* under my supervision.


Date: 26 August 2015          Prof. Ashok Joshi
Place: New Delhi

---

### *Letter of transmittal*

An optional element of reports, the letter of transmittal (or memo of transmittal) conveys the report to the audience. This serves the same purpose as that of a preface in a published document. As the letter of transmittal is the written version of what we would say if we were handing the report directly to the person who authorized it, its style is less formal than the rest of the report. For example, the letter would use personal pronouns (you, I, we) and a conversational tone.

The transmittal letter usually appears right before the table of contents. The contents of a letter of transmittal are

- Objectives/terms of reference
- Scope

- Methodology adopted
- Highlights of the analysis
- Important results
- Significance of the study
  Suggestions

- Any other details that may enable the audience to understand the report better
- Acknowledgements

This type of letter typically begins with a statement such as 'Here is the report you asked me to prepare on …'. The rest includes information about the scope of the report, the methods used to complete the study, and the limitations that became apparent. In the middle section of the letter, we may also highlight important points or sections of the report, make comments on side issues, give suggestions for follow-up studies, and offer any details that will help readers understand and use the report. We may also wish to acknowledge help provided by others. The concluding paragraph is a note of thanks for having been given the report assignment, an expression of willingness to discuss the report, and an offer to assist with future projects.

If the report does not have a synopsis, the letter of transmittal may summarize the major findings, conclusions, and recommendations. This material would be placed after the opening of the letter.

### Acknowledgements

This is a list of persons whom we may like to thank for their advice, support, or assistance of any kind. It is not only customary but also necessary to acknowledge even the smallest help rendered by people. While writing the 'Acknowledgements', the following guidelines should be remembered:

- Categorize the audience: Courtesy, real help, emotional support, secretarial assistance, etc.
- Vary the expressions: Do not begin each sentence with 'I thank'; such a monotonous beginning will reduce the impact of the acknowledgements. Here are a few openings:

| | |
|---|---|
| Thanks are due to … | Inadequate to express my sincere thanks to … |
| Our sincere appreciation to … | I am extremely grateful to … |
| We owe a lot to … | My heartfelt thanks are due to … |
| Mere thanks in few words would be highly … | I acknowledge with thanks the support rendered by … |

- Avoid clichés such as:

| | |
|---|---|
| First and foremost | Firstly ......... secondly ......... thirdly |
| Last but not the least | I take this opportunity to thank … |

- Avoid listing the names
- Divide the content (if long) into well-structured paragraphs

### Table of contents

'Table of Contents', generally titled simply 'Contents', helps the reader locate a specific topic easily and quickly. However, Contents need not to be included in a short report (ten pages or less). This table is actually the report outline we discussed earlier in its final form, or simply the frozen outline with page numbers. It indicates, in outline form, the coverage, sequence, and relative importance of information presented in the report. The Contents page is especially helpful to readers who wish to read only a few selected topics of the report.

The Contents lists all the three parts—prefatory, main, and supplementary—of the report along with their page numbers. It also lists the illustrations used in the report. However, if the report has more than five illustrations, a separate 'List of Illustrations' page can be included after

the Contents. Although the outline can have subheadings up to any level, the Contents page should include headings up to a maximum of three levels only. Depending upon the length and complexity of the report, this page may show only the top two levels of headings or only first-level headings. See an example of a Table of Contents in Exhibit 13.7.

**EXHIBIT 13.7    Table of contents**

| Table of Contents | |
|---|---|
| *Acknowledgements* | ii |
| *Abstract* | iv |
| 1. Introduction | 1 |
| 2. Growth of medical facilities—An overview | 4 |
| 3. Hospitals and dispensaries | 11 |
| 4. Beds | 16 |
| 5. Health centres | 21 |
|     5.1. Community | |
|     5.2. Primary | |
|     5.3. Sub | |
| 6. Conclusions | 30 |
| 7. Recommendations | 32 |
| Appendix | 34 |
| References | 41 |

### List of illustrations

As mentioned, this page serves as the Contents page for all the illustrations that appear in the report. Except tables, all other visual aids (graphs, maps, drawings, and charts) are grouped under the heading Illustrations or Figures. The List of Illustrations gives the titles and page numbers of all visual aids. When tables and figures are numbered separately, they should also be listed separately. These lists would enable the reader to quickly locate any specific illustration.

### Abstract

An abstract gives the essence of the report. In business reports it is known as the synopsis. The length of an abstract is generally 2 to 5 per cent of the report. The length and readership

of the report decide whether an abstract is to be included. If the report is less than ten pages it does not require either an abstract or a summary. (While an abstract is more appropriate in specialist-to-specialist communication, a summary is meant for all readers, and is longer than an abstract.) A report of 10–50 pages should have an abstract. If it is a long report, more than fifty pages, it needs both an abstract and a summary. An abstract is especially relevant in specialist-to-specialist communication where the reader would be expected to have some background knowledge of the subject. It does not allow abbreviations, acronyms, or illustrations. It tells the reader the following:

- Objectives
- Main findings or accomplishments
- Significance

Exhibit 13.8 shows a sample abstract written for an informative report on the Growth of Medical Facilities in India.

## EXHIBIT 13.8    Sample abstract

### Abstract

Medical facilities in India have grown considerably over the years. With the primary objective of providing a clear view of this growth over the years 2005–2015, this report analyses in detail the various facilities related to hospitals, dispensaries, and centres in our nation. Essentially the study would provide a comprehensive view of the medical facilities, which in turn would enable the authorities to decide upon improving the same in future.

### *Summary*

While an abstract is more appropriate in specialist-to-specialist communication, a summary, which is an optional element, is meant for all readers. It is longer than an abstract, 5–10 per cent of the length of the report. Business reports name 'Summary' as 'Executive Summary'. It presents the entire report in a nutshell. Summaries may contain headings, adequately developed text, and even visual aids. A well-written summary opens a window into the body of the report and allows the reader to form an impression of how well the topic of the report has been dealt with. Generally, the summary of a report presents information from various parts of the report in the same sequence as they appear in the report. After reading the summary, the audience should know the essentials of the report and be able to make a decision. Later, when they find time, they may read certain parts of the report to obtain additional detail. Table 13.7 presents the differences between an abstract and a summary.

**TABLE 13.7**  Differences between abstract and summary

| Abstract | Summary |
|---|---|
| • Essence of the report | • Entire report in a nutshell |
| • 2–5 per cent of the report | • 5–10 per cent of the report |
| • More relevant in specialist-to-specialist communication | • Meant for all readers |
| • Information is qualitative | • Information is both qualitative and quantitative |
| • Does not include illustrations | • May include certain illustrations |

### Preface

The preface, an optional element, is the preliminary message from the writer to the reader. It is quite similar to the letter of transmittal, except that it does not formally transmit the report. It seeks to help the reader appreciate and understand the report. The contents of a preface are as follows:

- *Factors leading to the report* (what was the prevailing situation or earlier studies carried out and hence the need for this study and report)
- *Organization of the report* (what do the various sections contain)
- *Highlights* (important observations and findings)
- *Significance* (how the report would enable the readers in further study or research; how best the study in the report would help them)
- *Acknowledgements* (Frequently, the acknowledgements can be dispensed with the preface. In the preface itself one can express his/her indebtedness to those who helped in the study.)

Generally, the preface appears only when the report gets published.

### Copyright notice

Copyright is a form of protection that covers published and unpublished literary, scientific, and artistic works, whatever the form of expression, provided such work is executed in a tangible or material form. Simply put, it means that if we can see it, hear it, and/or touch it, it may be protected.

Copyright laws grant the creator the exclusive right to reproduce, prepare derivative works, distribute, perform, and display the work publicly. For example, a copyright statement that reads '© Copyright 2015, OUP, India' means that the Oxford University Press, India has legal monopoly over the work, which was produced in 2015.

There is one thing that must be clarified, though. The actual *intangible idea* may not be copyrighted. What is copyrighted is the tangible result of the idea, which would be in the form of the published work.

An example:

### Main Text

The main text consists of the introduction, discussion, conclusion, and recommendations. This is the main body of the report, which gives the details of the study such as the method adopted, data collection methods, and the constraints under which the study was carried out.

### *Introduction*

The function of an introduction is to put the whole report in perspective and to provide a smooth, sound opening for it. It presents the subject or problem to the readers and gets their attention. A good introduction must furnish the readers with sufficient material concerning the investigation and problem, to lead them to an easy comprehension of the rest of the report. It should also give the readers a general view of the report before they plunge into the details. In other words, the introduction is a section where a broad, general view of the report, rather than a specific and analytical one, can be presented.

> A good Introduction must furnish the readers with sufficient material concerning the investigation and problem, to lead them to an easy comprehension of the rest of the report.

An introduction includes the following information:

**Background of the report**   Conditions/events giving rise to the project or survey need to be discussed here. Details of previous investigations and studies can also be included if there is significant time gap.

**Purpose and scope**   The background will logically lead to the purpose of the report. If the investigator has received the Terms of Reference, they can be presented verbatim. Otherwise the objectives have to be clearly specified. The purpose statement describes the objective as well as boundaries of the work. Stating which issues will be covered and which issues will not be covered is especially important in the case of complex, lengthy investigations.

**Authorization**   The authority who has assigned to do the project/conduct the survey should be mentioned. In other words, the recipient's name and designation should be mentioned.

**Basic principles or theories involved**   The important theories and principles used for analysing the data should be outlined.

**Methods of gathering data**   The methods used or the sources consulted for collecting the data should be mentioned.

**General plan in developing the solution (brief outline of methodology)**   The methodology adopted in the analysis should be outlined.

**General structure of the report (organization of various sections)**   The Introduction may contain subheadings such as objectives and procedures, which serve as significant guideposts for the readers.

Ending the Introduction with an explanation of the general plan of the report will provide a logical transition to the next section of the report. It can also be ended with the discussion of the procedures used to gather data; and then the next section would present the results. A brief outline of the results or main conclusions may also provide a logical transition to the first part of the Discussion section of the report.

### *Discussion*

The discussion section, the lengthiest part of the report, contains the information that supports the conclusion and recommendations, as well as the analysis, logic, and interpretation of the information. Here, information and data are presented, analysed, and interpreted. The writer must decide between pertinent data to include in the text and less important information to omit or relegate to the appendix. Meanings,

> The Discussion should lead the readers through the same reasoning process the author used to reach the conclusions and show them that they are sound.

ideas, and facts are made clear to the reader. Comparisons are made, facts are evaluated, and significant relationships are drawn. The solution of a problem may be given with an explanation of its advantages and disadvantages. Tables, charts, and other media for presenting figures and data are used. Other illustrative material may be included (the various types of illustrations that can be used are discussed in Chapter 1). Emphasis is on the results and their interpretation. The discussion should lead the readers through the same reasoning process that the author used to reach the conclusions and show them that they are sound.

Opposing contentions should be considered to show how the data prove otherwise. The writer should not assume that the reader agrees with a concept, unless it is generally accepted. Simple, straightforward statements of facts should be used, as these are most easily understood. Different aspects of the problem are treated in the discussion section. Major subject headings are used to guide the reader. Points may be arranged to suit the subject and reader.

> 'Tell your audience what you are going to tell them. Tell it to them. And then tell them what you have told them!'
>
> –Hilaire Belloc

### Conclusion

The conclusion is that section of the report where all the essential points developed in the discussion are brought together.

The function of this section is to bring the discussion to a close and to signal to the readers gracefully that they have reached the end. It also refers to the logical inferences drawn, the judgements formed on the basis of analysis of data presented in the report, or the findings of the investigation. This section has the following characteristics:

- Uses decreasing order of importance
- Can be narrative (in paragraphs) or tabular (in points)
- Uses narrative type when there are few conclusions
- Uses tabular form when there are more conclusions
- Both narrative and tabular forms are acceptable but the latter is better for quick comprehension.
- Contains only opinions and never suggests future actions to be taken by the reader
- Does not introduce any new idea not previously introduced into the report

Conclusions are the result of reasoned analysis and judgement of the data in the report and serve as a basis for recommendations growing out of the study. They may be summary or analytical in nature. Thus, the conclusion section is a recapitulation of the significant points developed in the discussion section. Concluding statements are supported by the facts in the discussion section.

An example of tabular type of conclusion is the following, taken from a consumer-preference survey made by Swift & Company for the moulded pulp egg carton versus the regular self-locking egg carton:

1. The moulded pulp carton is decidedly preferred, both by those having used it (77 per cent of them) and those who have not used it (68 per cent of them).
2. Protection is the principal reason of preference for the moulded pulp carton.
3. 'Hard to open' and 'can't see eggs' are the principal reasons for disliking the moulded pulp carton, given by those who have used it.
4. 15 per cent of those preferring the moulded pulp carton had opening troubles—69 per cent of those preferring the regular type found the pulp carton difficult to open.
5. 45 per cent of those preferring the moulded pulp carton liked to look at eggs before buying, compared to 74 per cent of those preferring the regular type. 'Want to see size' and 'colour' were given as reasons why.

Here is a sample of the narrative form of conclusion.

> Until the final comparative analysis of sales, there was relatively little to choose between the two cities. Both were certainly well adapted to a location for conducting the presenting surveys of a small national-scale advertising agency, although at this point Kansas City has probably shown itself to be slightly more representative of the nation than Cincinnati. The analysis of retail sales, however, completely changed the picture.

### *Recommendations*

Recommendations pertain to the action that is to be taken as a result of the report. They are supported by the conclusions, and they are aimed towards accomplishing the purpose of the report. If the purpose of a report, for instance, is to alleviate employee grievances over wage incentive plans, the recommendations will suggest ways in which this can be done. Conclusions and results of investigating the problem will support the recommendations.

Like conclusions, recommendations may take the form of a formal, long report. Recommendations generally follow the conclusions. They do not, however, always appear at the end of the report. They may be given first, especially in recommendation reports. They are also sometimes treated briefly in the letter of transmittal, preface, and separate summary section. If the reader is already familiar with the data or is chiefly interested in the action to be taken, then the recommendation should be presented first to avoid reading through a lot of material. If the reader is likely to react unfavourably to the recommendation, then it should be given at the end; the report can prepare the reader for it.

Recommendations, depending upon the relationship with the reader, can assume any of the following three types:

- Tentative (temporary solutions that may have to be reconsidered in future)
- Conciliatory (suggestions that may be accepted by the recipient)
- Aggressive (recommendations that are mandatory and are to be implemented immediately)

## Supplementary Parts

While prefatory parts precede the main body of a report, supplementary parts follow it. However, they have a lesser role to play that the prefatory parts because they are not mandatory for a report. For instance, many reports may not contain documentary evidences such as references, bibliography, etc. Nevertheless, their importance cannot be ignored as they provide certain additional details to the interested readers to enhance their understanding of the topic of the report. The following discussion throws some light on the various supplementary parts of a report:

### *Appendices*

This section of a report is used for information that has some relevance to the report but cannot be easily fitted into the text. It is a convenient way of presenting detailed information particularly of a descriptive nature, which, if inserted in the main body, would interrupt the smooth flow of the narrative. Hence, before including any material in the appendix, you should:

- See whether the material is related to the subject of your report
- Check whether it would interrupt the theme if included in the main body

An appendix should contain (a) material not strictly related to the main argument of the report but which nevertheless is of interest and (b) material that readers can safely omit but can consult if they want to examine the details, and also to carry out further study.

Generally, appendices contain materials such as sample documents, detailed calculations, experimental results, statistical data tables and graphs, specimen questionnaires or samples of forms used in investigations, summaries of results achieved by other organizations, etc. An appendix also helps to present recent work or data added at the last moment. It is better to put these in an appendix rather than completely rewriting the report.

If there are many appendices, they should be named as Appendix A, Appendix B, and so on. Also, an appropriate title should be given to each of them. However, lengthy and numerous appendices should be avoided, as they reveal the writer's poor organization.

### *Bibliography/references*

A bibliography is an alphabetical list of the sources—books, magazines, newspapers, CD-ROMs, Internet, interviews—that have been consulted in preparing the report. This list is used to

- Acknowledge and give credit to the sources of words, ideas, diagrams, illustrations, quotations borrowed, or any materials summarized or paraphrased
- Give the readers information to identify and consult the sources
- Give the readers an opportunity to check the sources for accuracy.

This section may be named as References or Works Cited if it includes works that were consulted or directly quoted for particular pieces of information, and are mentioned within the report in the form of citations.

Please refer to the online resource centre for referencing and bibliography for all kinds of technical documents.

### *Glossary and index*

The glossary is a list of technical words used in the report and their explanations. If small in number, the terms are explained in the form of footnotes. The decision whether to include a glossary or not depends upon the readers. If they are likely to be unfamiliar with the context, it would be better to include them.

The index is intended to serve as a quick guide to locate the material in the report. The readers can locate a topic, subtopic, or any other important aspect of the report quickly and easily. This element is generally used in bulky reports where the Contents do not serve the purpose of locating a particular issue. The index is arranged in alphabetical order (please see the index of this book) and is extremely helpful in cross-referencing.

## TYPES OF REPORTS

There are many different types of reports. The basic format and elements remain the same but they vary in terms of the purpose and extent of formality. We will discuss some common types in this section.

### *Introductory reports*

As the name suggests, these report introduce some topics but do not delve deep into any aspect. They just skim the surface of the issue, to give the audience a preliminary feel of it. Therefore, these are short reports and do not need subsections and subdivisions. The contents are brief and to the point.