

# Chapter 12

## Business Research Reports

Market researchers and decision makers conduct research on various problems/opportunities and base their future decisions on the findings of the research. Unless the research results are properly communicated in the reports, they would be of little use to managers. Managers cannot take valid and effective decisions unless the entire research findings are presented to them in a systematic manner. A business research report contains many items including findings, analysis, interpretations, conclusions and at times recommendations. These can be presented to the management either in a written form or communicated orally. For the research findings to be useful to the managers, the research report needs to be meticulously designed, with all the necessary contents properly arranged and presented.

This chapter deals with the fundamentals of report writing and presentation. The chapter begins with a description of the types of research reports, provides an insight into the various components of the written business research report and concludes with a description of the features of written and oral presentation.

### 12.1 Types of Research Reports

#### 12.1.1 Short Reports

Short research reports usually run into 4–5 pages and are prepared for those researches, which have a well-defined problem, limited scope and employ a clear-cut methodology. These reports usually start with a concise statement regarding the approval for the study, followed by the objective of the study, that is, the problem definition and the research overview, which contains concisely, the main part of the research, such as the methodology used. This is followed by conclusions based on the findings and recommendations, if any. The underlying basis for

these types of reports is to make information available, to all those concerned, in an easy-to-use format. Short reports are prepared even for small clients who have inexpensive projects.

### ***12.1.2 Long Reports***

As the name indicates, long reports are more detailed than the short reports. They can be further subdivided into technical and management reports based on the objectives of the researchers' and the end users'. Technical reports (TRs) are primarily meant for researchers. Management reports are meant for managers (as end users), to aid their decision-making.

#### **12.1.2.1 The Technical Report**

A TR should focus on a specific topic logically pertaining to the research objective. The report should include the following: a descriptive title, author name and information, date, list of keywords, informative abstract, body, acknowledgments, list of references and appendices. The introduction of each TR should clearly identify its thesis and an organizational plan for the same.

The body should consist of sources of data, research procedures, sampling design, and data collection methods, instruments used, and data analysis arranged into a standard format under motivation, methods, results and discussion. The TR should include sufficient procedural information for other users to replicate the study. Therefore, it should explain what was done, why it was done, what was discovered and what was significant in the findings. The report should identify clearly what is original about the work, and how it relates to past knowledge.

There is no minimum or maximum length requirement for a TR. However, usually they are of 10–15 pages. A good quality TR should have the conclusions and recommendations in line with the findings. While all necessary details should be referred to, it should avoid the inclusion of non-essential information and oversimplification.

#### **12.1.2.2 The Management Report**

Managers and decision-makers want information quick and straight to the point. Therefore, they show little interest in knowing the technicalities of the research. They are more interested in the ultimate findings and conclusions, which can act as a base for their decisions. As the management reports are meant for a non-technical audience, there should be very less use of technical jargons and wherever jargons are used, they should be explained using a footnote or in the appendices. The language of a management report should be such that it is easy to understand. Some of the other features of a good management report are as follows:

- Short and direct statements
- Underlining relevant parts for better emphasis
- Pictures and graphs accompanying tables
- Graphics and animations accompanying the presentation of the report

## 12.2 Components of Research Reports

Be they short or long, formal or informal, routine or special, public or private and daily/weekly/monthly/annual, research reports have a set of specified components. A typical research report has the followings sections:

- Prefatory information:
  - Letter of Transmittal
  - Title Page
  - Authorization Statement
  - Executive Summary
  - Table of Contents
- Introduction:
  - Problem Statement
  - Research Objectives
  - Background
- Methodology:
  - Sampling Design
  - Research Design
  - Data Collection
  - Data Analysis
  - Limitations
- Findings
- Conclusions and Recommendations
- Appendices
- Bibliography

### 12.2.1 Prefatory Information

The prefatory information contains the letter of transmittal, the title page, authorization statement, executive summary and table of contents.

*Letter of Transmittal.* The letter of transmittal is a sort of authorization by the client organization, citing approval for the project. This becomes necessary when

the relationship between the researcher and the client is formal. A transmittal letter consists of a salutation of the person who commissioned the report, the objectivity of the letter, a brief synopsis of the report, acknowledgements and follow-up action expected of the reader.

*Title Page.* The title page should include the following:

- The title of the report
- The date
- Name of the client
- Name of the organization and the researchers
- The nature of the project in a precise and succinct manner

The title should incorporate the following elements: the variables taken into account in the study, the type of relationship between the variables included in the study and the target population for whom the results can be useful. A short informative title can be effective.

*Authorization Statement.* A letter of authorization is a letter from the client to the researcher approving the project and specifying some of the details. Such letters usually accompany the research reports to federal and state governments where detailed information about authorization factors is required. At times, a reference to the letter of authorization in the letter of transmittal is deemed enough. The letter not only helps in identifying the sponsor, but also outlines the original request.

*Executive Summary.* This functions as a miniature report. The key findings are very concisely presented in the executive summary running into 100–200 words or a maximum of two pages. The major thrust of the executive summary should be on highlighting the objective, salient features and analysis of the results including the recommendations. Recommendations should be given if the client wants them, else should be avoided. This is because some decision-makers do not want their thought process to be limited to the recommendations given. As the executive summary is the gist of the whole report, it is framed only after the report is completed. Conclusions should be supported later and graphics should be used if necessary.

*Table of Contents.* The table of contents lists the divisions and sub-divisions of the report with appropriate page numbers. Shorter reports can suffice with the main headings only. As the table of contents lists the topics covered, it is preferable to take the headings from the headings in the report. A linking row of dots should connect the topics with the page number. The list should be in the same sequence as it appears in the original report. The list of tables, charts and graphs follows the table of contents.

### **12.2.2 Introduction**

The introduction gives an overview of the report. It highlights parts of the project like problem definition, research objectives, background material and the findings. It lays down the plan for the development of the project.

*Problem Statement.* This highlights the basic problem for the research will probe into. It explains the reason why the research is being conducted and is usually followed by a set of objectives.

*Research Objectives.* Research objectives form the heart of the study. They address the purpose of the project. Every research follows a set of well-planned objectives. Therefore, the general and specific objectives should be stated. These can be adjusted for sequencing without changing their basic nature. The research objectives can take the form of questions and statements. The objectives influence the choice of research methodology and the basic structure used to report the findings.

*Background.* Background information may include a review of the previous research or descriptions of conditions that caused the project to be authorized. It may entail preliminary results from an experience survey or secondary data from various sources. The references from secondary data, definitions and assumptions are included in this section. Background material depending on whether it contains the literature reviews or information relating to the occurrence of the problem is placed either after the research objectives or before the problem definition, respectively.

### **12.2.3 Methodology**

For short reports and management reports, it is not necessary to have a separate section on the methodology used. This can be included in the introduction section and details can be accommodated in the appendix. However, in the case of a TR, methodology needs to be explained as an independent section and include the following.

*Sampling Design.* The researcher in this section defines the target population and the sampling methods to use. This section contains other necessary information such as:

- Type of sampling (probability or non-probability) used
- Type of probability sampling (simple random or complex random) or non-probability sampling (quota sampling or snowball sampling) used
- The factors influenced the determination of sample size and selection of the sampling elements
- The levels of confidence and the margin of acceptable error

The sampling methods used should be explained and calculations should be placed in the appendix rather than in the body of the report.

*Research Design.* The research design has to be custom-made to the research purpose and should contain information on:

- Nature of the research design
- Design of questionnaires
- Questionnaire development and pre-testing
- Data that were gathered
- Definition of interview and type of interviewers
- Sources (both primary and secondary) from which data were collected
- Scales and instruments used
- Designs of sampling, coding and method of data input
- Strengths and weaknesses

Copies of materials used and the technical details should be placed in the appendix.

*Data Collection.* The contents of this section depend on the research design. As the name implies, data collection pertains to the information about:

- Time of data collection
- Field conditions during data collection
- The number of field workers and supervisors
- The training aspects of supervisors and workers
- Handling of irregularities, if any
- Subject assignments to various groups
- Administration of tests and questionnaires
- Manipulation of variables

If any secondary data were used, then the relevance of that data should be given. Details of field instructions and any other necessary information should be given in the appendix.

*Data Analysis.* This section provides information on the different methods used to analyse the data and the justification for choosing the methods. In other words, it should justify the choice of the methods based on assumptions. It provides details on:

- Data handling
- Groundwork analysis
- Rational statistical tests and analysis

*Limitations.* Certain researchers tend to avoid this section, but this is not a sign of professionalism. There should be a tactful combination of reference and explanation of the various methodologies and their limitations or implementation problems. The limitations need not be explained in detail. Details of limitations do not belittle the research. They help the reader in acknowledging its honesty and validity.

### ***12.2.4 Findings***

Most of the space in the report is devoted to this section. It presents all the relevant data but makes no attempt to draw any inferences. The section attempts to bring the fore any pattern in the industry. Charts, graphs and tables are generally used to present quantitative data. It is better to report one finding per page and support it with quantitative data.

### ***12.2.5 Conclusions and Recommendations***

Conclusions should be directly related to the research objectives or hypotheses. Conclusions are inferences drawn from the findings. The researcher should always present the conclusions as he has first-hand knowledge of the research study. It is wrong to leave the inference of the conclusions on the reader.

Recommendations on the other hand are a few corrective actions presented by the researcher. They highlight the actions the report calls for as per the researcher. The recommendations should be in line with the results of the report and should be explicit. They may even contain plans of how future research for the same can proceed. However, recommendations ought to be given only if the client is interested. It may happen that the client does not want any recommendations on the findings. In such a case, the report should not carry any recommendations.

### ***12.2.6 Appendices***

Appendices are optional. They should be used to present details that were part of the research but were not necessary to the presentation of the findings or conclusions.

Appendices include raw data, calculations, graphs, copies of forms and questionnaires, complex tables, instructions to field workers and other quantitative material that would look inappropriate in the main text. The reader can refer to them if required. However, care should be taken that they do not exist in isolation and reference to each appendix is given in the text.

### ***12.2.7 Bibliography***

A list of citations or references to books or periodical articles on a particular topic is known as a bibliography. It contains all the works consulted in the preparation of

the report, not just those referred to in the text. A consistent reference format should be used all through the section.

## 12.3 Written Presentation

### 12.3.1 *Pre-writing Concerns*

The effectiveness of a research report depends on how well it is presented. A report has many parts and all parts should display interconnectivity. This interconnectivity is possible only with a meticulous organization of the different parts of the report. This organization should be reflected in the initial sections of the report. A good researcher spends significant amount of time in designing this initial section wherein he tries to relate the purpose of the report, the audience it is meant for, the technical background and the limitations under which the report is written.

Customizing the report to the tastes of different audience is necessary. The gap arising due to degree of difference between the subject knowledge of the writer and the reader should be taken into account. The technical knowledge of the end-users may not match that of the researcher so the report should be written in a simple manner with less technical jargons. This would enable the readers to understand the theme of the project and relate the conclusions to the specific objectives outlined in the report. In fact, all parts of the report should coherently pursue the research problem. This means that the conclusions and findings when integrated backwards should show some connection with the research objectives, which were framed in line with the problem situation. This unified structure assists the reader to understand how the research problem was probed into and how the project was accomplished. As the final organized report is written after the research is over, the researcher can relate the facts and present the findings in a manner that would appeal to the reader. Pre-writing concerns, therefore, play an important role in designing the research report. Pre-writing entails the following sections:

- Outline
- Bibliography

*Outline.* The best way to organize a report is to develop an outline of the main sections. The outlining stage gives a natural progression to the various stages of report writing. The outlining stage concentrates on how it should be presented to make an impact on the readers. In trying to establish the relation among the various parts, the outline should introduce the complete scope of the report. As said earlier, the outline should contain the main headings of the various sections along with their sub-headings and sub sub-headings. This task is now made easy with the help of special software that helps in drawing a proper outline for a project report.



Two styles of outlining can be generally identified, that is, the topic outline and the sentence outline. The topic outline includes a key word or phrase that reminds the writer of the nature of the argument represented by the keyword. The sentence outline on the other hand gives a description of the ideas associated with the specific topic. A traditional outline structure for a TR is shown below.

- (1) Major Topic Heading
  - (A) Main Sub-topic Heading
    - (1) Sub Sub-Topic Heading
      - (a) Further Details.

A newer form of outlining is the decimal form. Decimal form of outline is shown below.

- (1) Major Topic Heading
  - 1.1 Main Sub-topic Heading
    - 1.1.1 Sub Sub-Topic Heading
  - 1.2 Main Sub-topic Heading
    - 1.2.1 Sub Sub-Topic Heading

*Bibliography.* As defined earlier, bibliography is a list of citations or references to books or periodicals on a particular topic. It is necessary to provide the details of the secondary sources used to prepare the technical or long report. Special software can help in searching, sorting, indexing and formatting bibliographies into any required style. This software helps to cite the references from online sources and translate them into database records, which can be used for future referrals.

### ***12.3.2 Writing the Draft***

Different authors have different styles of presenting their work. Some prefer to write the report themselves doing the additions/deletions, while others depend on a good editor to transcribe their reports into the required format. The quality of a report depends upon the following:

- Readability and Comprehensibility
- Tone
- Final proof

*Readability and Comprehensibility.* A report has to be properly understood by the readers to achieve high readership. Therefore, a researcher should take into account the needs of the reader before preparing the report. The basic requirements

of a report are readability and comprehensibility. The following points should be noted in this context:

- It is necessary to avoid ambiguous statements.
- The report should be checked for grammar.
- As far as possible, simple words that convey the meaning clearly should be used.
- Sentences should be reviewed and edited to ensure a flow from one statement to another.
- Larger units of text should be broken down into smaller ones without altering the original meaning.
- Visual aids should be provided wherever required for better understanding.
- Visuals should not be inserted at the end of a section. They should be placed within the section for better comprehensibility.
- Each paragraph should contain only one idea.
- Underlining and capitalization should be used to differentiate and emphasize the important ideas from the secondary and subordinate ideas.
- Technical terms and jargons should be avoided wherever possible. Wherever unavoidable, they should find a reference in the footnotes.
- Each reference should include the name of the author, article title, journal title, volume, page numbers and year. Journal titles and book titles should be in italics. Book references should also include the publisher's name.
- Symbols, abbreviations, diagrams and statistics should find a reference, if necessary.

*Tone.* Proper use of tone is essential for better reading effects. This highlights the attitude of the writer and reflects his understanding of the reader. The report should make tactful use of details and generalizations. It should focus on facts and not the opinions of the writer. The report should make use of passive voice as far as possible and should avoid the use of first person. Recommendations should not undergo any sort of alterations to give them a positive image.

*Final proof.* Final editing of the draft should be taken up after a gap of at least a day. This helps in identifying mistakes, if any, better and correcting the mistakes. Final editing requires various questions to be answered pertaining to the organization, contextual and layout of the final report. This can be done a couple of times and looking at the report with a different focus each time. The executive summary follows the final stage of editing.

### ***12.3.3 Presentation of the Research Report***

A business researcher can present the findings of the research either in an electronic format or as a printout. Irrespective of the medium the researcher chooses to present his report, he should ensure that the findings are presented in a professional

manner to the end-user. Some of the important aspects that should be considered for presenting a report are listed below.

- Reports should be typed or printed using an ink-jet, laser, or colour printer.
- The report should have a uniform font.
- The findings of the research study should be placed under appropriate headings and sub-headings.
- Leave ample space between the lines and on all sides for better reading. Overcrowding creates problems and is stressful for the eyes.
- Split larger text paragraphs into smaller paragraphs.
- Use bullet points to list specific points.
- Ensure that appropriate labels are assigned to every table, figure and graph that appears in the report.

## **12.4 Oral Presentations**

The findings of the research may be presented orally. Such presentations are made to a small group of people (decision-makers/managers) who are more interested in the critical findings of the report. Therefore, unlike written reports that are elaborate, oral presentations are only briefings. Oral presentations are known to continue for 20–30 min, but presentations extending beyond an hour are not uncommon. Such sessions are interactive where the audience clarifies their doubts at the end of the presentation. Some distinctive features of oral presentation are explored in the subsequent sections.

### ***12.4.1 Initial Planning***

This basically requires the speaker to preplan certain strategies for a better presentation. For this, the speaker gets in touch with the organizers to determine the following:

- The type of speech expected of him/her. Whether the interaction will be an informal chat or a formal discussion.
- Whether the audience will consist of general or specialist clients and their numbers.
- Whether the time allotted will be sufficient for an exploratory presentation or whether the presentation will have to be a short one consisting of only the major points.
- The expected content of the presentation. This is to have an idea of what the audience expects of the presentation, so as to get prepared in advance.
- The type of audio-visuals to be used to facilitate the presentation.

- Whether a memorized speech or an extemporaneous presentation will create a better impact.

### ***12.4.2 Preparation***

Once the content of the presentation is decided, the next step involves planning how to present it. For the presentation to be well constructed and tidy, it has to be prepared well in advance. The preparation should include framing a time bound outline and a proper homework of the content in advance. The following points need to be taken into account:

- The content collected should be jotted down in big, bold letters highlighting the problem, its importance and steps to be taken.
- The outline of the presentation should be such that it keeps the interest of the audience alive throughout the presentation.
- Sentences should be short and appropriately arranged to follow a logical sequence.
- Determine the content that has to be supported by visual aids.
- The presenter should get a feel of the room and the equipment, if possible 1 day in advance.
- The presenter should do a thorough rehearsal of the presentation. This can be done in the presence of colleagues to get their feedback and make corrections if necessary.

### ***12.4.3 Making the Presentation***

This involves the execution of all that is rehearsed. It should start with a warm welcome or a greeting to the audience. The execution of the presentation would consist of the following:

*Opening.* The opening should be as brief as possible using not more than 15 % of the allotted time. The opening section should provide an overview of the entire presentation. It should include the reasons for the initiation of the project and its objectives. It is necessary to start the presentation with a startling fact, a pertinent question, or an interesting statistical figure to grab the attention of the audience.

*Findings and Conclusions.* Findings and conclusions should immediately follow and it should be ensured that each conclusion is in line with the research objectives. The speaker should spend 60 % of the allotted time in explaining the details of this section.

*Recommendations.* The recommendations should appropriately follow the conclusions thus maintaining the flow of the presentation. After the presentation is over, it can be thrown open to the audience for questions.

The following points need to be taken into account during the presentation:

- Be ready with the opening statement when being introduced by the host.
- Use a natural, moderate rate of speech and use automatic gestures.
- While using laser pointers, remember not to point them at the audience.
- If lights need to be turned off, do it but not completely and for long.
- Try to interact with the audience and maintain eye contact.
- Try to have an impressive and memorable summary.
- While doing all this, keep a strict eye on the time factor. It is good to finish before time; never overshoot the time limits.

#### ***12.4.4 Delivery***

An oral presentation is said to be effective when the content of the presentation is accompanied by the positive approach of the speaker. Therefore, the dress, speed of speech and tone and pitch of voice of the speaker play an important role in the success of a presentation. First time or inexperienced speakers may get nervous and this nervousness comes in the way of an effective presentation. Taking a few deep breaths, before starting the presentation helps in overcoming the nervousness. The presenter can arrive early and greet people as they walk in and have a chat. This creates a relaxed atmosphere. The following problems should be taken care of:

- **Vocal Problems**
  - Try to speak loud enough to be heard by the audience.
  - Avoid speaking too fast and give a pause after every sentence, but not a long one.
  - Vary the volume, tone according to the content.
  - Use appropriate language. For example, get the right level of formality/informality.
  - Watch out for too much ‘uh,’ ‘you know,’ ‘okay’ and other kinds of nervous verbal habits.
- **Physical Behaviour**
  - Avoid habitual behaviour (pacing, fumbling change in pocket or twirling hair).
  - Use hands to emphasize points but do not indulge in too much hand waving.
  - Do not turn your back to the audience and neither keep looking at a single individual. Try to maintain eye contact with all.
  - Avoid being a barrier between the audience and the OHP or the display screen.
  - Do not fumble with visuals. Arrange them in order, in advance.

- **Handling Questions**

This is the most important section of the oral presentation. This session evaluates the interaction abilities of the speaker. A few points are worth considering in this regard.

- Postpone questions aimed at resolving specific problems (or arcane knowledge). This is particularly important if the answer is expected to distract either the presenter or the audience away from the flow of the presentation.
- The presenter should repeat the question so that the entire audience knows about the question and the presenter gets time to understand the question.
- The presenter should not interrupt the questioner in the middle and try to answer. He should wait for the question to be complete.
- Take a pause before starting to answer.
- If the presenter is not able to answer the question, he should say so.
- The presenter can offer to research an answer and then get back to the questioner later or ask for suggestions from the audience.
- The presenter should avoid prolonged discussions with one person, extended answers and especially arguments.

## 12.5 Visual Aids

### 12.5.1 Tables

A research report more often than not contains quantitative data to substantiate the various findings. These quantitative findings if presented in a narrative form would go unnoticed by the reader. Therefore, a better way of representing them is to make use of tables to present the statistics. Tables save the writer from being caught in details, which can be boring. Data in the form of tables form a vital part of the report and makes the comparisons of quantitative data easier.

There are two types of tables based on their nature: general and summary. General tables are large, complex and exhaustive. As they are very comprehensive, they are usually reserved for the appendix. Summary tables, on the other hand, are concise and contain data that are closely associated with an explicit finding. This form of table can be customized to make it appealing. This can be done by retaining such important details only that will aid the reader in understanding the contents of the table. Tables should be used when graphs or figures cannot make the point.

A table should have the following features:

*Title and Number.* The title should be brief and yet all-inclusive of the information provided. It should be comprehensive enough to explain the subject of the table, the data classification and the relationship between the column and row headings.

It may also include a sub-title, if required. The sub-title usually includes the measurement units used. If different measurement units are used in different parts of the table, it should be appropriately mentioned. All tables in a report should be numbered and a reference for each should be given in the text. The table title and number usually appear at the top.

*Bannerheads and Stubheads.* Bannerheads are the identifying criteria for the contents of the columns. Bannerheads specify the contents of the columns, that is, what data the column holds. Stubheads perform the same function for the contents of the rows.

*Footnotes.* Any special reference to or explanation that cannot be incorporated in the table is given in the form of footnotes. Letters and asterisks instead of numbers are used to spot footnotes, as they help to avoid confusion with data values. Footnotes as they appear at the bottom of the page are also used to explain unfamiliar abbreviations to the reader.

*Source.* Tables derived from secondary sources cannot be deemed to be original. Therefore, they should bear a source note that acknowledges the table to the original source. A source can be anything from a published or printed material to company websites. The source is generally given at the bottom of the table.

## ***12.5.2 Charts and Graphs***

Charts and graphs in a research report tend to translate numerical information into visual form for better understanding of the subject matter. Like tables, charts and graphs also have a number and a title, labels for parts of the figure and sources and footnotes. Graphs and charts which depict a general trend are accompanied by a statement as ‘not to scale’ to avoid any confusions. Charts can be of the following types:

- Line Graphs
- Pie Charts
- Bar Charts

### **12.5.2.1 Line Graphs**

A type of graph that highlights trends by drawing connecting lines between data points is known as a line graph. A line graph is a bar graph with the tops of the bars represented by points joined by continuous lines. This presents an eye-catching way to illustrate trends and changes over long, continuous intervals. A line graph takes statistical data presented in tables and represents them in rising and falling lines, steep or gentle curves. Line graphs have an *X*-axis (horizontal) and a *Y*-axis (vertical), both labelled. When a time variable is used, the *X*-axis is numbered for the time period, which is the independent variable, and the *Y*-axis is numbered for

what is being measured, which is the dependent variable. Line graphs represent data that change with time, such as cycles, fluctuations, trends, distributions, increases and decreases in profits, employment, energy levels and temperatures. A line graph shows trends in data clearly, and hence, it is possible to predict the future trends for which data have not been collected.

### **12.5.2.2 Pie Charts**

A type of presentation graphic in which percentage values are represented as proportionally sized slices of a pie is known as a pie chart. These charts are used to display the sizes of parts of some total quantity at a particular time. They can be used to compare different parts among themselves or with the whole. Therefore, they are represented in percentages. Before drawing a pie chart, it should be ensured that the sum of the different parts to be included totals 100. This is because the pie chart is a circle. The slices of varying percentages are arranged proportionately in a descending order, in a clockwise direction, with the largest slice occupying the 12 o'clock position in the circle. Different parts in the pie are shaded with different colours for better identification. Each slice is labelled horizontally and its appropriate percentage of the whole is also mentioned. As pie charts are round figures, they are usually labelled outside the circle. Pie charts can be misrepresented if parts of the whole are left out and if the whole is not defined as to what it stands for.

### **12.5.2.3 Bar Charts**

A bar graph demonstrates the magnitude, sizes of several items or emphasizes the difference at equal intervals of time. Each bar represents a separate quantity, and multiple bars may be grouped and displayed horizontally or vertically. It shows the changes in the value of the dependent variable plotted on the Y-axis at discrete intervals of the independent variable plotted on the X-axis. Bar graphs are similar to line graphs with the difference that instead of using points, horizontal or vertical rectangular bars are used. Use of bar graphs makes it easier to point out differences among several items in a chart with multiple variables, over a time period. They tend to emphasize the rise or fall of one variable under the influence of another. Bar charts are of various types like pictogram/histogram grouped bar charts, segmented bars or deviation bar charts.

## **12.6 Summary**

The essence of a business research report is the way it is presented, be it in the written format or orally. This makes it imperative for the report to be inclusive of all the necessary details. These details may vary according to the specific



requirements of the clients. Business reports are of two types, that is, short and long. Short reports are concise and are made for those researches that have a well-defined problem, limited scope and employ a clear-cut methodology. Long reports are detailed and usually comprise of technical and management reports. The various components of these reports are as follows: prefatory information, introduction, methodology, findings, conclusions and recommendations, appendices and bibliography. While preparing a written report, the following points should be taken care of:

- Pre-writing concerns which consist of preparing, organizing and formatting the outline and bibliography.
- Writing the draft that requires adapting the tone of the report to the tastes of the audience for better readability and comprehensibility.
- Presentation considerations, which include the type of writing to be used, font of the words, formatting and preparing the cover of the report.

An oral presentation generally concentrates on the summary of the project with emphasis on the findings, conclusions and recommendations. Therefore, the essential criteria for a successful oral presentation are as follows:

- Initial planning, where the speaker plans certain strategies in advance regarding what to include in the report for a better presentation.
- Preparation, where he decides how to assemble the necessary items to maintain a flow in the presentation.
- Making the presentation, where he actually concentrates on presenting the essential findings of the report and the conclusions based on the objectives.
- Delivery, which provides essential tips on points to be taken care of during a presentation.
- Visual aids, which bring out the various ways in which the statistical findings can be presented for a better impact of the presentation.