

Reports: Organisation

Purpose

Reports are often written in response to a request for information. They are presented in a way that makes it easy for the reader to locate and extract the information needed. You should aim to give an account of a problem, your investigations and findings, interpretations of the findings and, if required, recommend change or action.

DESCRIPTION

Reports have distinct sections marked by headings, a combination of paragraph and point form for clarity, visual/graphical data and a clear and concise writing style (short sentences and clear wording).

Report Sections

All reports include the sections in bold highlighted in the following list unless you are told otherwise. Other sections in the list are commonly found in professional engineering documents as well and may be required of reports in your School.

Title	The first thing people read. Make it concise but informative.
Summary or Abstract Preface Acknowledgments	In less than 200 words What was the problem, how was it investigated, what did you find and what does it mean?
Abbreviations used Table of contents Introduction	Set the scene; give some background of the topic: State the aim/purpose of the investigation and outline the body sections.
Suitably headed sections forming the body of the report	Organise the sections in a logical sequence: what you investigated, what you found, what interpretations and judgements you formed: use short informative headings and subheadings.
Conclusion Recommendations	what has been achieved and what is the significance of your findings and discussion?
References Bibliography	A list of sources of information presented in the report
Appendices Index	A place to put additional relevant data that otherwise would interfere with the flow of the body of the report



Report Sections

A written report documents the results of an investigation of a design, a problem or a topic of interest. A report is usually written so that information can be easily extracted. Depending upon its length and purpose, a technical report will include a number of sections. The more common sections are listed below. Essential sections common to all reports are marked with an asterisk.

Title Page*

Presents routine information and an informative title. Design your title page to be simple yet functional and appropriate for the audience and the task. Some of the more common elements found on the title page include:

- Institution/ Organisation's name (e.g. The University of New South Wales).
- · Course name and code.
- Title of the report—a concise description of the topic.
- Author (name and for students, include your student number).
- For whom the report is submitted (for students, this is your lecturer).
- · Date of submission/ completion.
- Signed statement of originality (it is important to declare ownership of the report in case there are future questions).

All the assignments you submit will require a School cover sheet. In many cases this will function as your title page. Check your course instructions for cover sheet requirements.

Abstract*

Provides an overview of *the most important aspects of the report*, including your main conclusion. Ideally it should be less than one page, varying between 50 and 250 words though for most reports, the former is more common.

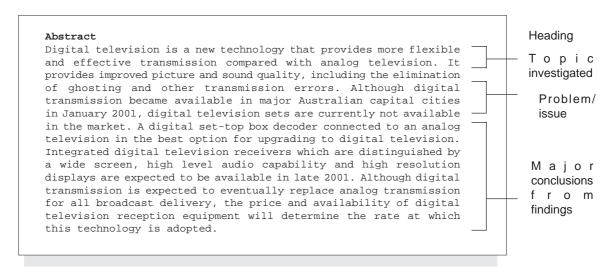


Figure 1. Sample Abstract for a General Report on The Introduction of Digital Television Technology

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The abstract should clearly and briefly state the following:

- · What was investigated (topic).
- Why it was investigated (issues or questions).
- · How it was investigated (the method is usually nominated but not explained).
- Major conclusions from the findings (frequently missed by students).
- Major recommendations (to suggest change or that further action is required).

Acknowledgement

Usually included in a thesis or a similar long report, but not usually included in an undergraduate report. Thank the people and organisations who helped and supported you in providing resources and/or information. For example, your lecturer/supervisor, individuals or organisations or other students and staff who gave important information or advice. If your report contains information that is unpublished, you should state who gave you permission to include the information. This is important when you are involved in an industry partnership and the ownership or intellectual property of information needs to be documented. A few sentences or a short paragraph is usually all that is required.

Contents Page

Indicates the structure of the report and assists the reader to locate specific information of particular interest in a report. Include heading, subheading and page numbers.

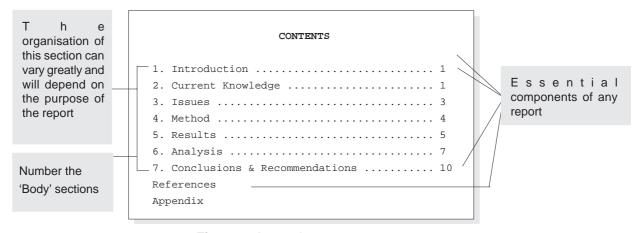


Figure 2. A sample contents page

Introduction*

The first section in the main body of a report. Earlier sections are preparatory only.

The introduction is very important as it sets the context for the report. It contains the background to the report (usually an explanation of the topic, why the report was produced and the aims of the report) and an outline of how the report is organised. It does not contain any findings or recommendations. Length can range from one paragraph in a short report to several pages in a large report. See Figure 3 for a sample introduction.

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Body of the Report*

The structure of the main body of a report will vary depending on the purpose. Ultimately the final content and its order will depend on your original task and what you want to tell the reader. More importantly, the body of the report should support your conclusions. A comparison of the differences in structure of three reporting scenarios follows and are examples only.

General Report

Purpose: To provide a balanced account on a topic or on an area of knowledge. The report is a record of the investigation and its outcomes. The study will involve gathering information from different sources, analysing this information and making a conclusion.

The main body of this type of report *might* contain a summary of the topic, an analysis of current unresolved problems or areas of particular interest, and a discussion of future directions or possible solutions.

When planning and writing a general report, you must decide what section headings to use. The headings would describe for the reader the topic of the section and in some cases the purpose of the section.

Report on Experiments

Purpose: To describe the experimental work in sufficient detail so the experiment can be reviewed and, if necessary, repeated and/or modified. It is also **important to draw conclusions from the data** and to place these conclusions in the context of other related work. Typical sections in the body *might* include:

- Theory and/or current knowledge on the subject (This provides the context for your research)
- Objectives of the experiment or test (Questions you are investigating)
- Procedure/Method (What you did and why)
- · Results (What you found)
- Analysis and Discussion (Why these results? What do the results mean?)

Short experimental reports are called laboratory reports. Complex experimental reports (for example a thesis) may involve a number of procedures/methods sections. Usually after each separate procedure/method, the findings and discussion are presented.

Industrial Training Report

Purpose: An account of activities, training and observations.

Typical sections in the body *might* include:

- Site description—what the organisation does/produces, layout, staff organisation etc.
- · Summary of your work.
- Description of other training received.
- The professional role of an engineer made apparent through the training.
- Any other issues that drew your attention.

(Available online - http://www.eet.unsw.edu.au/programs/faq.html#it

Technical Design Report

For notes on organising a design report, see the textbook 'Engineering by Design', pp. 12-16.

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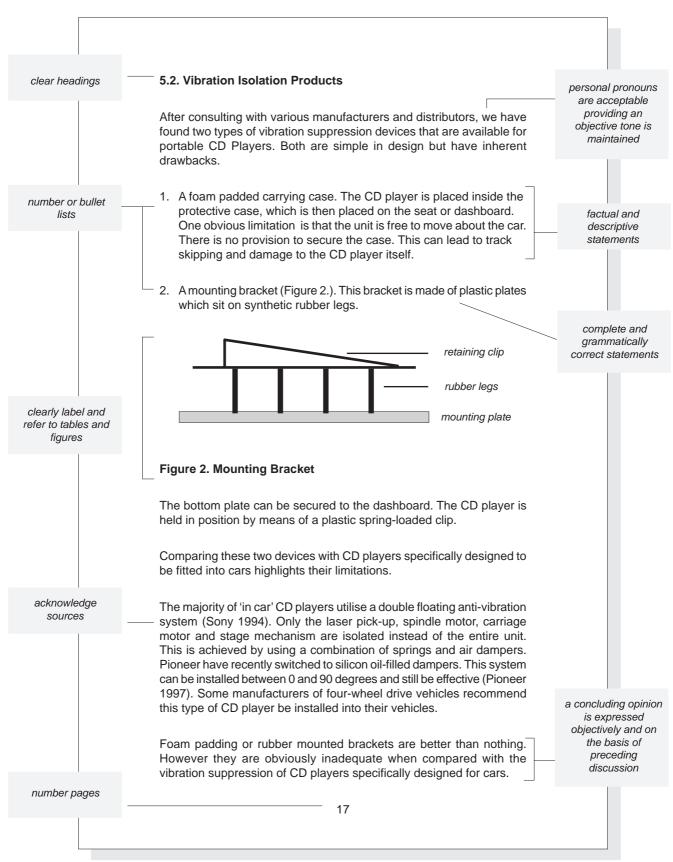


Figure 4. Annotated page from a 1st year report



Conclusions* & Recommendations

Every report should include some concluding statements on the subject of the report. Your conclusions should be justified or supported by the body of the report. Try to organise from most important to least important. Your concluding statements would principally relate to the impact of the study, analysis, new design, or solution, i.e., what this report has achieved. No new information is introduced in the conclusion. Note: a conclusion is NOT a summary.

The recommendations consider whether all the original objectives (as stated in the introduction) were achieved. If not, what alternative action might be considered. If all the objectives were achieved, what further questions may or should be resolved in the future?

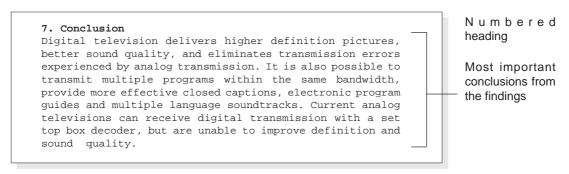


Figure 5. Sample Conclusions to a General Report on Digital Television Technology

References*

A reference list includes all the sources of information referred to in the report. It is most important and must be complete to comply with the statement of originality. The information you need to reference may be data, quotations and illustrations from other reports, textbooks and technical papers, etc. The references may be sorted alphabetically by author and year of publication. Some reference lists use a number system. There are specific conventions and punctuation that must be followed in drawing up the reference list. Ask your tutor which referencing system they prefer you to use.

Appendices

The main body of the report should only contain information that is directly relevant to the discussion. This usually requires the summarising and selecting of specific information from all the data you have gathered, and ignoring the rest.

Appendices provide additional or supporting information that, while not crucial to an understanding of the main facts and recommendations, may be of further interest to the expert reader. This additional information should be placed at the end of the report. Direct the reader to the appendix as you would to a figure or table , e.g.; "See Appendix A for additional ..." . Appendices include tables of raw data, a detailed description of equipment, large or detailed drawings, or a copy of a questionnaire or interview. Normally these are listed as Appendix A, Appendix B, Appendix C, and so forth.