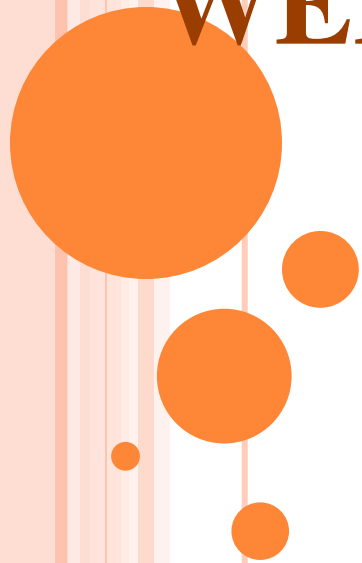


**WEL COME**



# TECHNICAL REPORT WRITING



# SHORT TECHNICAL REPORTS

- Types of Reports

- Proposals,
- progress reports,
- tour reports,
- completion report,
- investigation reports,
- feasibility studies,
- evaluation reports etc.



Note: the readers of the report are knowledgeable people.

They will search for the evidence that you understand the material and ideas you have presented.

- Therefore try to give information clearly and coherently.
- Organize your ideas carefully and express them coherently, also be precise and concise.



# COMPONENTS (FORMAT)

1. Title page
2. Abstract or summery
3. Introduction
4. Background
5. Discussion
6. Conclusion
7. Recommendations
8. Attachments



# TITLE PAGE

- Essential information given here is
  - Name of the report writer
  - The title of the project/study and
  - Date
- Choose effective title,  
(ensure it is informative but reasonably short)
- Avoid ornamental or misleading titles



# ABSTRACT OR SUMMARY

- Abstract/summary summarizes the report  
(presented in 100-200 words)

Hint: summarize each component in one sentence.

Emphasize the objective and result.

(avoid to copy paragraphs from the report)

Abstract should be precise and specific.



# INTRODUCTION

The introduction of a technical report identifies the subject, purpose (objective) and the plan of development.

State the subject clearly and concisely (usually in one sentences called as thesis or purpose sentence)

Give: background information,

Define the terms used in stating the subject  
provide the background theory or history

Note: Don't fill the place and give sweeping statements.





# BACKGROUND

This section is included in the report if the introduction requires a large amount of information.

It includes

- Review of previous research
- Formulas the reader need to understand the problem



## DISCUSSION

It is the most important part of a report.

It can be presented in many forms and can have many subheadings.

### Basic components

- Method
- Findings
- Evaluation or analysis



# CONCLUSION

- Knowledge outcome

Explain in terms of preceding discussion



# RECOMMENDATIONS

- The actions the report suggests
- Also, gives plans for further research

(in professional writing this section is given just after the introduction)



# ATTACHMENTS

Includes

Appendixes

Appendixes include

- Raw data
- Calculations
- Graphs
- Other quantitative material that were the part of research

In private sector profile of the company/professionals involved in the project also appear as appendices.



# WRITING REPORTS

- Purpose of report writing
  - A report is written to be read
  - Written for sake of writing has no value
- Top-down Approach
  - First write section level outline
  - Subsection level outline, and
  - Paragraph level outline

At paragraph level

Think of using figures, tables and graphs

Terminology – names of various protocol/ algorithms/  
steps

Refine your writing.



# STRUCTURE OF A REPORT (ROUGH STRUCTURE)

## The title

- Make attract people to read
- It should reflect what u have done and should be eye-catching

## ○ The abstract

- Should be short paragraph (generally 250 words)
- Should contain the essence of the report

## And contain

- Objective
- Motivation
- Main point of methodology
- Essential difference from previous work
- Some significant results



# STRUCTURE OF A REPORT (ROUGH STRUCTURE)

## ○ Introduction

(answers the questions)

- What is the setting of the problem? (background)
- What exactly is the problem you are trying to solve? (Problem statement)
- Why is the problem important to solve? (motivation)
- Is the problem unsolved? (statement of past related work)
- How have you solved the problem? (essence of approach)
- What are the main results? (main summary of the result)
- How is the rest of the report organized (flow of ideas)

Introduction is the shorter version of the report.





# STRUCTURE OF A REPORT (ROUGH STRUCTURE)

## ○ Background

- Written/given if there is sufficient background (for understanding of the reader before knowing the details).

## ○ Past related work

- Has a separate section
- You explain novelty in your work
- Think of dimensions of comparison with other works.

## Placement of the related work

- Place it at the beginning of the report after introduction and background.
- If your work is entirely different from any past work then place it at the end of the report.



# STRUCTURE OF A REPORT (ROUGH STRUCTURE)

## ○ Technical sections

- The report can be divided into multiple sections
- The organization is problem specific
- Separate sections may be for design methodology, experimental methodology or proving some facts

## Necessary to mention

### Outlines/flow

- Rough outline for a bigger section/containing subsections
- Maintain the flow
- No abrupt shift from one idea to another

### Use of figures

“A picture is worth a thousand words”.

## Explain the aspects of the figure

### Terminology

- Define each term/symbol
- Use common terminology throughout the report

(Contd....)



# STRUCTURE OF A REPORT (ROUGH STRUCTURE)

## Results

- ❑ Use separate section for experimental/design papers
- ❑ Answers the following question
  - What aspects of your system or algorithm you are trying to evaluate?/What are the questions you will seek to answer through the evaluations?
  - Why are you trying to evaluate the above aspects?(if proposed an algorithm or design)
  - What are the cases of comparison?
  - what do compare it with?
  - What are the performance matrix? Why?
  - What are the parameters under study?
  - What is the experimental set up?
  - What are the results?
  - Why do the results look the way they do?



# STRUCTURE OF A REPORT (ROUGH STRUCTURE)

- Future Work

- In some cases combined with conclusions section
- States problems you have not considered and possibilities for further extensions.

- Conclusions

- States precisely the main take-away points from your work.



# Thanks

