

IT647- IT688 Project Guidelines

Topic: Data Mining in Business Intelligence

Project Objective

The goal is to write an academic paper explaining how data mining techniques support Business Intelligence (BI) in making better organizational decisions.

you should demonstrate:

- Understanding of BI concepts
- Knowledge of data mining methods
- Ability to connect theory to real business cases

Paper Requirements

Length & Format

- 6–10 pages
- IEEE or APA format
- Font 12, Times New Roman, 1.5 spacing

Paper Structure

1. Introduction

Define Business Intelligence and Data Mining and explain why BI needs data mining.

2. Literature Review

Discuss previous research on BI systems, data mining in business, and AI/ML in BI. Use at least 5–8 academic references.

3. Data Mining Techniques in BI

Explain method used as classification, clustering, association rules, or prediction/regression and how each helps your businesses .

4. Results analysis

Explain your results and analyze .

5. Benefits & Challenges

Benefits include better decisions, customer insights, and cost reduction. Challenges include data quality, privacy concerns, and complexity.

6. Conclusion

Summarize findings and discuss future trends.

7. References

Use academic sources such as IEEE, Scopus, or Web of Science with proper citation.

First Presentation Guidelines- week 5

Duration: 10–15 minutes per group

Slides (10–15 slides) should include:

Title

- 1- Problem statement : What business problem are you solving and why it is important.
- 2- Proposed idea : Describe your data mining idea and what you plan to analyze or predict.
- 3- Data source : Explain where the data will come from (public dataset or simulated data).
- 4- Method or technique : Specify which data mining methods you will use such as classification, clustering, or prediction.
- 5- Expected outcome :Describe expected insights or results and how businesses can benefit.

Final Presentation Guidelines- week 14-15

Duration: 10–15 minutes per group

Slides (10–15 slides) should include:

1. Title slide
2. Introduction
3. BI overview
4. Data mining methods
5. Proposed Approach
6. Benefits & challenges
8. Conclusion
9. References

Evaluation Criteria

- Content quality (40%)
- Understanding of topic (30%)
- Presentation skills (20%)
- Design & organization (10%)

Important Notes

- No plagiarism
- All members must participate
- Use diagrams or examples
- Submit before the deadline