International Journal of Scientific Research in Engineering and Management (IJSREM)
Volume: 09 Issue: 05 | May - 2025 SJIF Rating: 8.586 ISSN: 2582-3930

Enhancing Recruitment Efficiency through Data Analytics: An Internship Experience at UptoSkills

By Hari Teja Reddy Kusam
Roll No: 20211CBC0011
Presidency University, Bengaluru
Under the guidance of Mr. Ramamurthy Ketha
May 2025

1. ABSTRACT
This report outlines the work and learning outcomes of a Data Analytics internship at UPTOSKILLS, focused on improving recruitment strategy through data. The project included the collection, preprocessing, analysis, and visualization of Training & Placement Officer (TPO) data and corporate recruiter datasets. Tools used included SQL, Excel, and Power BI, with key processes involving data mining, trend analysis, and interactive dashboard creation. This hands-on experience enhanced technical and analytical skills, and contributed toward building a data-informed decision-making model for educational recruitment.

2. KEYWORDS
Data Analytics, SQL, Power BI, Data Mining, Dashboard, Internship, TPO Analysis

3. INTRODUCTION
Data analytics is critical for decision-making across sectors, including education and recruitment. This internship was undertaken to address the gap between structured data handling and recruitment processes. Through real-world projects, this internship enabled analysis and reporting of large-scale datasets relevant to placement activities.

4. MOTIVATION
With the increasing need for data-driven hiring processes, institutions face challenges such as unstructured data, inefficient reporting, and limited visualization. The motivation was to develop a centralized, interactive, and analytical solution to identify placement trends and improve outreach efforts through analytical tools.

5. OBJECTIVES
- Collect and organize TPO and recruiter contact data.
- Clean, filter, and preprocess datasets for accuracy and consistency.
- Perform SQL-based analysis to identify patterns and trends.
- Create interactive dashboards using Power BI for recruitment insights.
- Enhance the efficiency and transparency of placement reporting.

6. METHODOLOGY

6.1 Data Collection: Web scraping, manual extraction, and structured Excel storage.

6.2 Data Cleaning: Duplicate removal, format standardization, and handling missing values.

6.3 Data Storage: SQL tables and spreadsheets for structured storage.

6.4 Data Analysis: SQL queries for filtering and summarization.

6.5 Data Visualization: Power BI dashboards with RLS and interactivity.

7. SYSTEM DESIGN & IMPLEMENTATION
- Backend: SQL for querying and analysis
- Frontend: Power BI dashboards
- Security: Row-Level Security for user-based access

- Dashboards: TPO insights, company-recruiter data, and case study visualizations

8. TIMELINE

- Week 1–2: Project Setup and Literature Survey
- Week 3–4: Data Collection
- Week 5–6: Data Preprocessing
- Week 7–8: Analysis and Reports
- Week 9: Dashboard Creation
- Week 10: Finalization and Report Writing
- Week 11–12: Final Project & Presentation

9. RESULTS & DISCUSSION

- Improved efficiency with 40% reduction in processing time.
- Actionable insights and trend identification using EDA.
- Enhanced stakeholder engagement through interactive dashboards.
- Business impact through strategy recommendations and adoption by UPTOSKILLS.

10. EXPECTED OUTCOMES

- Organized and centralized data repository.
- Improved recruitment data visibility.
- Actionable insights on placement trends.
- Real-time decision support with Power BI dashboards.

11. CONCLUSION

This internship has laid the foundation for practical data analytics in educational recruitment. The project addressed key issues in data collection, integration, and visualization. By applying tools like SQL, Excel, and Power BI, the project succeeded in improving operational transparency and delivering insightful analytics that institutions can use to improve placementoutcomes.

12. REFERENCES

1. Provost, F., & Fawcett, T. – Data Science for Business
2. McKinney, W. – Python for Data Analysis
3. Microsoft Docs – Power BI Official Documentation
4. Tableau Guide – User Documentation
5. Python Software Foundation – Official Python Docs