




Ramamurthy Ketha

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A REPORT
ON
**Enhancing Recruitment Efficiency Through
Data Analytics: An Internship Experience at
Uptoskills**

Submitted by,

Mr.Hari Teja Reddy Kusam - 20211CBC0011

Under the guidance of,

Mr. Ramamurthy Ketha, Assistant Professor

in partial fulfillment for the award of the degree of

BACHELOR OF TECHNOLOGY

IN

COMPUTER SCIENCE AND ENGINEERING

At



PRESIDENCY UNIVERSITY

BENGALURU

MAY 2025

PRESIDENCY UNIVERSITY

PRESIDENCY SCHOOL OF COMPUTER SCIENCE AND

ENGINEERING

CERTIFICATE

This is to certify that the Internship report **Data Analytics** is been submitted by Hari Teja Reddy bearing roll number: 20211CBC0011 in partial fulfillment of the requirement for the award of the degree of **Bachelor of Technology in Computer Science and Engineering** is a bonafide work carried out under my supervision.

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Pro-Vice Chancellor - Engineering

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Presidency University

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DECLARATION

1

I hereby declare that the work, which is being presented in the Internship report entitled **Data Analytics** in partial fulfillment for the award of Degree of **Bachelor of Technology in Computer Science and Engineering**, is a record of our own investigations carried under the guidance of **Mr. Ramamurthy Ketha, Assistant Professor, School of Computer Science and Engineering, Presidency University, Bengaluru**. I have not submitted the matter presented in this report anywhere for the award of any other Degree.

Name	Roll No	Signature of the Student
Hari Teja Reddy Kusam	20211CBC0011	

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ABSTRACT

This report presents the comprehensive experience gained during a Data Analytics internship at UPTOSKILLS, a platform focused on providing real-time skill development opportunities. My internship was all about diving deep into data to forge stronger ties between colleges and companies for smarter hiring. The mission? To collect, refine, analyze, and showcase data about college Training & Placement Officers (TPOs) and corporate recruiters in a way that sparked meaningful connections. The journey unfolded in three key stages:

Data Gathering: First, I scoured the web to collect details on colleges, TPOs, and corporate HR contacts, carefully organizing everything into clean, structured formats like Excel spreadsheets.

Data Crunching: Next, I rolled up my sleeves and used SQL to clean up the datasets, weed out inconsistencies, and uncover valuable insights through targeted queries. This phase was like solving a puzzle, piecing together patterns that could guide better recruitment strategies.

Data Storytelling: Finally, I brought the data to life with vibrant, interactive Power BI dashboards. By weaving in filters, aggregations, and Row-Level Security (RLS), I ensured the visuals were not only insightful but also secure and user-friendly.

Through this hands-on experience, I sharpened my skills with tools like Excel, SQL, and Power BI, while grounding my understanding of data processing, reporting, and business intelligence in real-world applications. The internship was a game-changer, equipping me with the know-how to tackle industry-grade data projects with confidence and clarity.

ACKNOWLEDGEMENTS

1 First of all, we indebted to the **GOD ALMIGHTY** for giving me an opportunity to excel in our efforts to complete this project on time.

We express our sincere thanks to our respected dean **Dr. Md. Sameeruddin Khan**, Pro-VC - Engineering and Dean, Presidency School of Computer Science and Engineering & Presidency School of Information Science, Presidency University for getting me permission to undergo the Internship.

2 We express our heartfelt gratitude to our beloved Associate Dean **Dr. Mydhili Nair**, Presidency School of Computer Science and Engineering, Presidency University, and **Dr.S.Pravinth Raja, Associate Professor**, Head of the Department, Presidency School of Computer Science and Engineering, Presidency University, for rendering timely help in completing this project successfully.

1 We are greatly indebted to our guide **Mr.Ramamurthy Ketha Assistant Professor** School of SOCSE Presidency University and Reviewer **Dr. SWAPNA.M, Associate professor**, School of Computer Science and Engineering, Presidency University for her inspirational guidance, and valuable suggestions and for providing us a chance to express our technical capabilities in every respect for the completion of the Internship work..

We would like to convey our gratitude and heartfelt thanks to the CSE7301 Internship Coordinator **Mr. Md Ziaur Rahman and Dr. Sampath A K**, department Project Coordinators **Ms.Suma** and Git hub coordinator **Mr. Muthuraj**.

We thank our family and friends for the strong support and inspiration they have provided us in bringing out this project.

Hari Teja Reddy Kusam

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CHAPTER 1

INTRODUCTION

1.0 About The Organization

UptoSkills is an organization for skills development and training that empowers professionals and students by providing them with industry-focused knowledge and real-world expertise. I experienced while at UptoSkills how it can be immensely powerful to integrate academic learning with real-world experience. There is a way of throwing you in the deep end with real-world projects, expert advice, and tools that actually work today's job market. Whether coding, analyzing data, or creating cool web applications, they provide training that is alive and applicable. What was impressive was their ability to match learners with industry mentors who have an understanding of what companies need. It's not so much learning—it's becoming someone who's ready to step into a career with confidence and actual skills.

1.0.1 Vision

UptoSkills' mission is to be a skill-building center that turns enthusiastic learners into confident, job-ready experts by combining classroom smarts with real-world know-how through innovative, experiential learning experiences.

1.0.2 Mission

We're here to inspire passion in students and working professionals alike, giving them the tech skills that employers demand through real-world projects, hands-on learning, and guidance from expert mentors. We seek to inspire a love of lifelong learning with innovative, industry-specific content and tools. Our lofty goal? To create a solid bridge between school and work, developing sharp problem-solvers with killer analytical and communication skills.

1.0.3 Goals

- A. Roll out excellent training in red-hot fields like Data Analytics, Web Development, AI/ML, and Cloud Computing that prepare students for success.
- B. Collaborate with colleges and industry partners to develop learning experiences that are real-world and relevant.
- C. Develop internship opportunities where students can transfer book learning and impact real projects.
- D. Enhance career paths with resources such as resume workshops, practice interviews, and job placement assistance.

1.0.4 Objectives

- A. Provide each student with the technical and analytical proficiencies that modern industries expect.
- B. Make students familiar with essential tools such as SQL, Power BI, Python, and Excel via authentic, hands-on practice.
- C. Hone critical thinking and problem-solving through projects that challenge and inspire students.
- D. Establish a vibrant, student-centered community where innovation, collaboration, and career development thrive.

1.1 Overview of the Internship

Data science is a kind of superpower for making wiser decisions in today's dynamic businesses. Businesses use it to find game-changing information, improve their workflow, and inform daring strategies. My internship was a dive into this realm, with hands-on experience digging up information, dissecting it, and making it into transparent, visual narratives—abilities I now wear as a badge of honor.

The essence of the internship was to collect, clean, analyze, and present facts regarding college Training & Placement Officers (TPOs) to maximize hiring and placement initiatives. Here's what I got my hands dirty with:

Gathering all sorts of data—clean and dirty—from multiple sources.

Cleaning and structuring that data to ensure it was accurate and trustworthy.

With SQL to drill down into the numbers and identify patterns that could inform smarter decisions.

Creating clean, interactive Power BI dashboards that brought those insights to life.

This experience did my eyes justice in terms of how data is able to transform recruitment processes and provided me with serious confidence utilizing tools such as SQL, Excel, and Power BI. It wasn't purely about number-crunching—it was about being taught to teach data to communicate a story which creates real-world impact.

1.2 Role of Data Analytics in Professional Development and Recruitment

Data analytics is transforming the way education and hiring operate, emerging as a top choice for sharper, wiser decisions. Schools and businesses are going all-in on data-driven insights to refine hiring strategies and select the top talent with precision.

Here's why data analytics is a recruitment game-changer:

Smarter Choices: Identifying key trends in placement and hiring patterns to inform decisions.

Structured Data: Maintaining data clean and well-organized so that it is readily accessible in the future.

Improved Targeting: Identifying the ideal candidates by tracing data leads.

Measuring Success: Reflecting on previous hiring trends to refine future approaches.

By tapping into SQL for pulling data, Excel for crunching it, and Power BI for turning it into eye-catching visuals, organizations can make their recruitment process smoother and more effective. This internship showed me how these tools can help colleges and companies level up their hiring game with clear, data-backed approaches.

This chapter lays the foundation for the objectives of the internship and emphasizes why data analysis is a big deal in recruitment and training. Subsequent chapters will delve into the nitty-gritty, pitfalls, and learnings from this experience.

1.3 Scope Of The Internship

This internship project was a dive into data analytics, taking every step from gathering raw data to spinning it into clean, actionable insights—all in the service of refining recruitment and placement strategy. Fundamentally, the project was an attempt to construct a neat, organized dataset of Training & Placement Officer (TPO) information from different colleges and identify trends to make the placement process more efficient and intelligent.

Here's what the project tackled:

Data Gathering: Rounding up contact info for TPOs, Vice Chancellors, and Department Heads from colleges far and wide.

Data Cleanup: Weeding out duplicates, fixing errors, and getting everything into a consistent format to keep the data rock-solid.

Data Crunching: Running SQL queries to sift through the data, tweak it, and pull out insights that matter.

Data Storytelling: Stirring up interactive Power BI dashboards and reports to highlight trends in a way that's easy to understand.

Smarter Decisions: Providing insights that offer organizations a clear direction to level up their campus hiring game.

The project highlights how data analytics has the potential to actually impact schools and recruitment departments as a strong tool for placement coordinators and recruitment professionals. By putting stats, automation, and nice graphics together, the outcomes of this project have the potential to make hiring easier and data management a lot simpler.

1.4 Methodology Adopted

The method for this project was similar to a well-choreographed dance, proceeding according to a clean, step-by-step playbook for data analytics so that every item of information was treated with attention and purpose. The process transpired over multiple critical stages, each

advancing upon the previous to transform raw data into actionable power for recruitment and placement efforts.

Data Gathering: I immersed myself in gathering TPO information from everywhere—university websites, online listings, and databases. Whether web scraping software or getting my hands dirty with manual gathering, the aim was to bring together a worthwhile dataset.

Data Cleanup & Prep: Then there was the nitty-gritty of cleaning up. I tracked down and removed duplicates, put phone numbers, emails, and college names into a standard format, and worked on missing or buggy data to ensure everything was sound and ready to go.

Data Storage & Organization: The sanitized data had a place in SQL databases and Excel spreadsheets, nicely sorted into organized tables. This arrangement made it easy to draw information whenever analysis needed it.

Data Analysis & Insight Hunting: I sliced and diced the data using SQL, querying to aggregate and filter it for more insight. Statistical magic did the rest, revealing patterns, trends, and relationships that could inform wiser recruitment strategy.

Data Visualization: To make the discoveries come alive, I created dynamic Power BI dashboards with dense charts, graphs, and tables. Those images didn't only depict placement trends and recruitment efficiency—They depicted a narrative which could easily be understood by the stakeholders and also be implemented accordingly.

Wrapping Up & Looking Ahead: Finally, I concluded the main findings and presented practical recommendations to enhance campus recruitment initiatives. I also identified areas where data analytics could continue to move the needle in education and hiring.

This organized, reflective process demonstrated exactly how powerful data analytics can be, taking raw data and spinning it into understandable, actionable information that enables organizations to hire smarter and work more effectively.

LITERATURE REVIEW

2.1 Data Mining

2.1.1 Definition and Importance

Data mining is extracting, cleaning, and organizing vast amounts of raw data to determine patterns, relationships, and useful information. It is extensively used in industries to enhance decision-making, business intelligence, and strategic planning.

2.1.2 Techniques Used

Some of the techniques frequently used in data mining are:

Web Scraping: Automated extraction of data from websites.

Manual Data Collection: Collection of information from publicly available records.

Database Extraction: Extraction of structured data from relational databases through SQL queries.

Data Cleaning: Removing duplicates, standardization, and missing value handling in order to enhance the accuracy of the data.

For this project, data mining was employed for gathering and organizing Training & Placement Officer (TPO) information from a variety of colleges.

2.2 Data Analysis And Statical Techniques

2.2.1 Role of Data Analysis in Decision-Making

Data analysis is essential in converting raw data to useful conclusions. It entails the use of statistical techniques, querying methods, and pattern identification to obtain useful trends to be used in guiding business or school decisions.

2.2.2 Tools and Technologies Applied in Data Analysis

SQL (Structured Query Language): Utilized to query and process large amounts of data.

Python & Pandas: Utilized to perform statistical analysis and data transformation.

Excel: Utilized to arrange and structure tabular data.

For this internship project, SQL was utilized to a great extent in filtering and analyzing TPO data. Statistical methods like descriptive analysis, trend forecasting, and clustering were also applied to gain insights further.

2.3 Data Visualization

2.3.1 Significance of Data Visualization

Data visualization assists in representing intricate datasets in a simplified, interactive format, making the insights more comprehensible and accessible to stakeholders.

2.3.2 Data Visualization Tools

Power BI: Business intelligence software used to design interactive dashboards and reports.

Matplotlib & Seaborn (Python): To plot graphs and to analyze the distribution of data.

Power BI: It was utilized for this project to design dashboards that graphically depict major trends in TPO recruitment data such as:

Geographical distribution of TPO contacts.

Missing or incomplete record analysis.

Identification of trends for recruitment success rates.

2.4 Existing Method Research Gaps

Though data analytics is increasingly being implemented in education and recruitment, some issues remain to effectively deal with big-scale data:

No Centralized Storage of Data

There are no standardized formats for the difficulty of cleaning and integrating data.

Issues with Manually Collected Data

Unstructured and scattered data is extremely labor-intensive for compilation.

Data accuracy checks and validation take a lot of time and resources.

Restricted Utilization of Visualization for Placement Analysis

Institutions use conventional reporting formats rather than dynamic dashboards.

There is a requirement for enhanced real-time analytics during the recruitment process.

2.5 Summary of Literature Review

This chapter covered important details of data mining, analysis, and visualization concerning this internship project. The literature noted current problems with TPO data collection, precision, and usage. This review's findings have directly contributed to the approach and methodology applied in this project, which shall be explained in the subsequent chapter.

CHAPTER-3

RESEARCH GAPS OF EXISTING METHODS

3.1 Overview of current Tools

The report points to a number of limitations of existing techniques for dealing with and leveraging data for recruitment and placement policy-making, specifically with respect to TPO data. These limitations are essential to identifying difficulties encountered during report preparation and data-informed decision-making.

Lack of Centralized Data Storage

Description: A lot of institutes lack a common, organized data repository for recording TPO data. This gives rise to discontinuous data found in multiple places, including websites of colleges, directories, or handwritten records.

Impact on Report Generation: As there is no common repository, report generation and accurate analysis takes time and creates scope for inconsistencies. The data has to be collected from diverse, mostly variant sources by the analysts, thereby creating inefficiency and missing clues.

Absence of Standardized Formats

Description: Unstandardized data formats (e.g., phone number, email address, institution name) make data integration and cleaning more challenging.

Consequence on Report Generation: Preprocessing is very labor-intensive for non-standardized data to make them consistent before analysis or visualization. This makes it harder to generate trustworthy reports and pushes the report generation timeline further back.

Challenges in Manual Data Collection

Description: A lot of the TPO data is dispersed and unstructured, and it takes a lot of manual effort to collate. Moreover, checking the accuracy of this data is time-consuming.

Impact on Report Generation: Manual gathering slows down the process of generating datasets for analysis, whereas validation problems (e.g., incorrect contact information or duplicates) can undermine the quality of reports, making them less useful for decision-making.

Limited Use of Visualization for Placement Analysis

Description: Most organizations stick to the old reporting mechanism (e.g., static table or text summaries) instead of taking advantage of dynamic, interactive visualization platforms such as dashboards.

Impact on Report Generation: The lack of advanced visualization diminishes the power to convey detailed information in an easily consumable and actionable form. Stakeholders would not be able to effectively understand trends or insights in real-time, hence diluting the reports' efficiency.

Need for Real-Time Analytics

Description: Current methods often lack real-time data processing capabilities, meaning reports may reflect outdated information rather than current trends.

Impact on Report Generation: Without real-time updates, reports may fail to provide timely insights, which is particularly critical in fast-paced recruitment environments where placement strategies need to adapt quickly.

CHAPTER-4

METHODOLOGY

4.1 Data Overview

The method is sequential in nature, designed to transform unstructured raw data into useful information. It is subdivided into separate phases, each dealing with a significant element of the data analytics process.

The phases are established to bridge the research shortcomings enumerated (e.g., absence of centralized storage, problems of manual collection, and insufficient visualization) and enable smooth report generation and decision-making.

Data Collection Objective: Collect TPO information, such as Training & Placement Officer contact details, Vice Chancellor's contact details, and Departmental Heads' contact details from colleges.

Methods:

Web Scraping: Programmed extraction of data from college sites and web directories through tools or scripts.

Manual Collection: Extraction of data from publicly available documents or direct sources where it wasn't possible for automation.

Database Extraction: Extracting applicable structured data from readily available relational databases, if accessible.

Purpose: Developing a complete dataset from various sources to fill the gap of unstructured and scattered data.

Data Cleaning & Preprocessing

Objective: Making data accurate, consistent, and reliable for analysis.

Steps:

Duplicate Removal: Identifying and removing duplicate entries (e.g., multiple TPO contacts).

Format Standardization: Converting data into standardized formats (e.g., standardized phone number formats, email formats, and institution names).

Managing Incorrect Values: Imputing confirmed data where available or marking incomplete records for removal or additional analysis.

Purpose: To minimize the lack of standard formats and enhance data integrity to make it appropriate for downstream analysis and reporting.

Data Storage & Management

Objective: Structure the cleaned data in an organized and accessible format.

Method:

SQL Databases: Data storage in relational tables with standardized schemas for fast querying and retrieval.

Excel Spreadsheets: Storing secondary datasets or backups in tabular format for manual inspection or lower-scale analysis.

Purpose: To create a centralized storage system, filling the research gap of not having centralized data repositories, and facilitating scalable data management.

Data Analysis & Trend Identification

Objective: Extract meaningful insights and patterns from the structured dataset.

Techniques:

SQL Queries: Filtering, aggregating, and joining data to answer particular questions.

Statistical Analysis: Using descriptive statistics, trend projection, or clustering to reveal correlations and important metrics (e.g., recruitment success rates).

Purpose: To convert raw data into actionables, enabling data-driven recruitment strategy decision-making.

Data Visualization & Reporting

Objective: Display findings in an interactive and easy-to-understand format for stakeholders.

Tools and Outputs:

Power BI Dashboards: Developing dynamic visualizations like charts, graphs, and maps to draw out trends (e.g., geographical spread of TPOs, recruitment efficiency).

Reports: Reports: Developing short tables and narratives to support the visual findings.

Approach: Guaranteeing interactivity for stakeholders to dig deeper into data (e.g., filtering by college or placement measures).

Prioritizing data-driven storytelling to enable insights to be accessible and actionable.

Purpose: To counteract the lack of visualization in placement analysis through delivering contemporary, dynamic reporting tools that facilitate better stakeholder comprehension.

Conclusion & Recommendations

Objective: Summarize findings and present actionable recommendations from the analysis.

Steps:

Assembling major findings from data analysis and visualization steps.

Providing recommendations for enhancing campus hiring processes (e.g., focusing on high placement potential colleges).

Determining aspects to be enhanced in the future (e.g., connecting real-time data feeds).

Purpose: Closing the loop by converting findings into actionable outcomes and proposing methods for overcoming outstanding gaps, including the requirement for real-time analytics.

CHAPTER 5

OBJECTIVES

5.1 Initial Tasks

- To gather comprehensive information about colleges and their TPO's & Corporate Data.
- To clean and organize the raw data for analysis.
- To analyze trends in placement activities using SQL queries and aggregations.
- To create insightful and interactive dashboards using Power BI.
- To enhance data-driven decision-making capabilities for placement-related analysis.

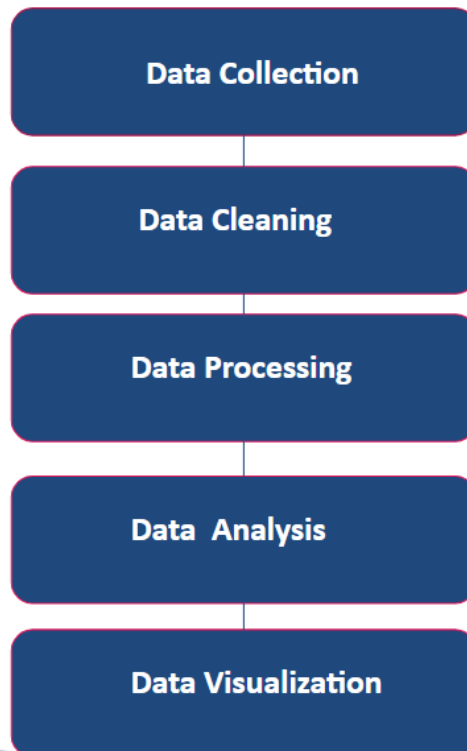
5.1 Final Project

- To gather the Dataset from any sources e.g. Kaggle .
- To clean and organize the raw data for analysis.
- To analyze trends, patterns, activities using SQL queries and aggregations.
- To create insightful and interactive dashboards using Power BI.
- To enhance data-driven decision-making capabilities for Business related analysis.

CHAPTER 6

SYSTEM DESIGN & IMPLEMENTATION

6.1 System Design:



Activate
Go to Setti

- **Data Source:** Manually collected data stored in Excel sheets.
- **Backend:** SQL used for data preprocessing, filtering, and basic analysis.
- **Frontend:** Power BI used for creating dynamic dashboards.
- **Security:** Implementation of Row-Level Security (RLS) using USERPRINCIPALNAME() for user-specific views.

Implementation Steps:

1. Data mining of colleges and TPOs/Corporate Data.
2. Data cleaning and Preparation.
3. Database design and table creation using SQL.
4. Loading data into Power BI for report creation.
5. Designing dashboards with cards, bar charts, pie charts, and filters.
6. Deployment and testing of visualizations for accuracy and usability.

CHAPTER-7

TIMELINE FOR EXECUTION OF PROJECT

7.1 Gantt Chart

The internship project was executed over a period of 3 months from 23-01-2025 to 23-04-2025. The timeline was divided into key phases to ensure timely completion:

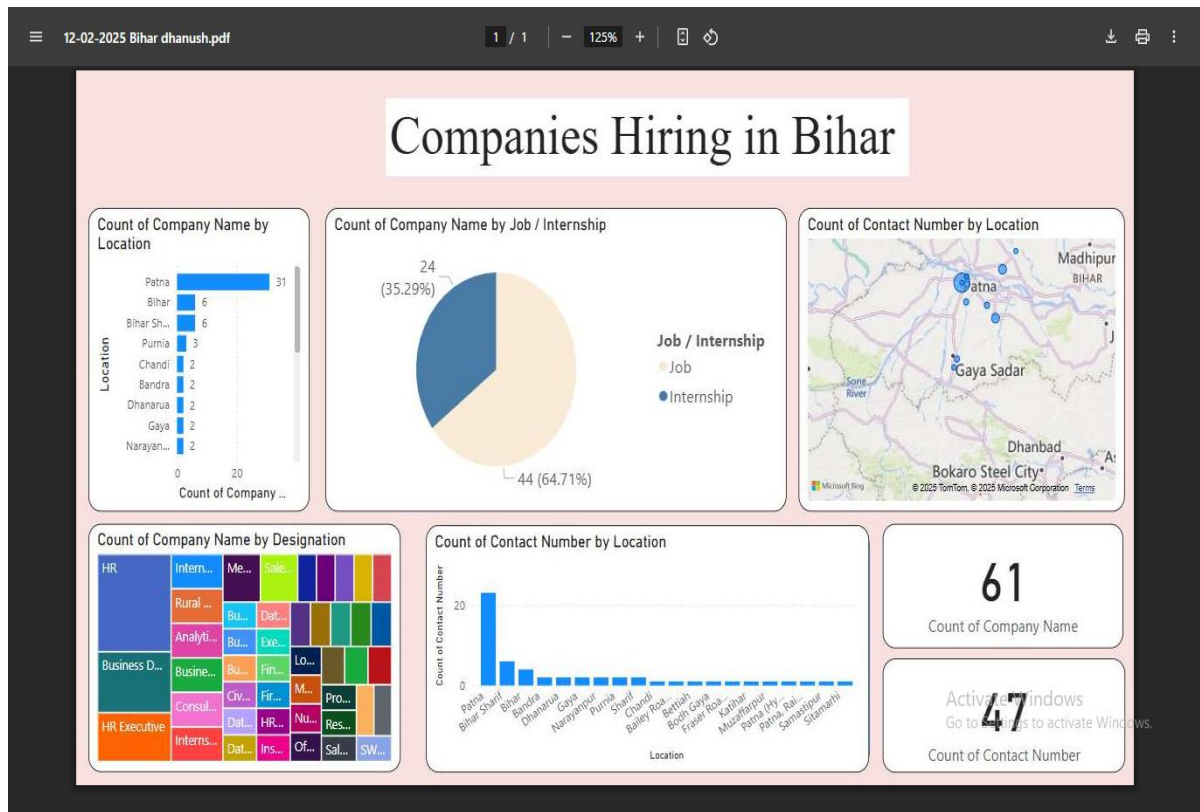
Phase	Duration	Activities
Week 1-2: Project Setup	2 weeks	-understanding requirements - Literature review - Data collection
Week 3-4: Data Preprocessing	2 weeks	- Data cleaning - Initial EDA
Week 5-6: Analysis	2 weeks	- Detailed EDA - Model development
Week 7-8: Visualization	2 weeks	- Dashboard creation - Report preparation
Week 9: Validation	1 week	- Cross-checking results - Feedback from mentors
Week 10: Finalization	1 week	- Report preparation - Presentation To TL's
Week 11-12: Final Project	2 weeks	-Final Project -Presentation to TL's

CHAPTER - 8

OUTCOMES

8.1 Output Screens

Figure 1
Corporate Data Bihar





Corporate Data Karnataka

Pizza Sales Order Analysis

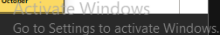


Figure 4
Pizza Sales Customer Traffic Analysis

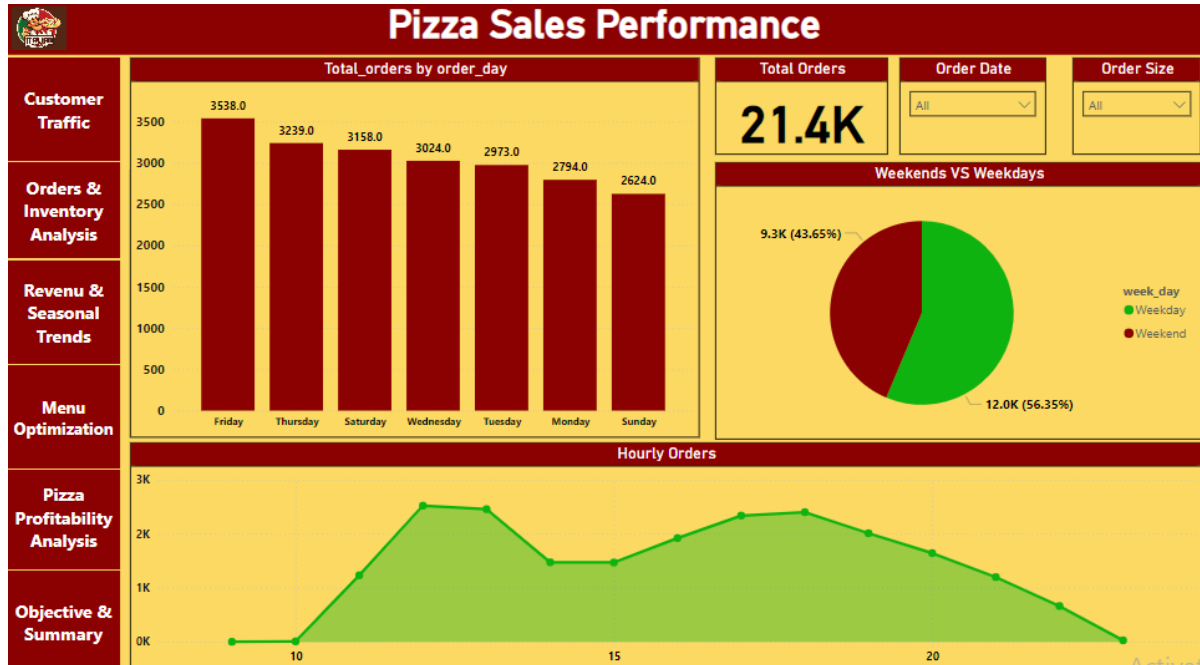


Figure 5
Pizza Sales inventory Revenue Analysis

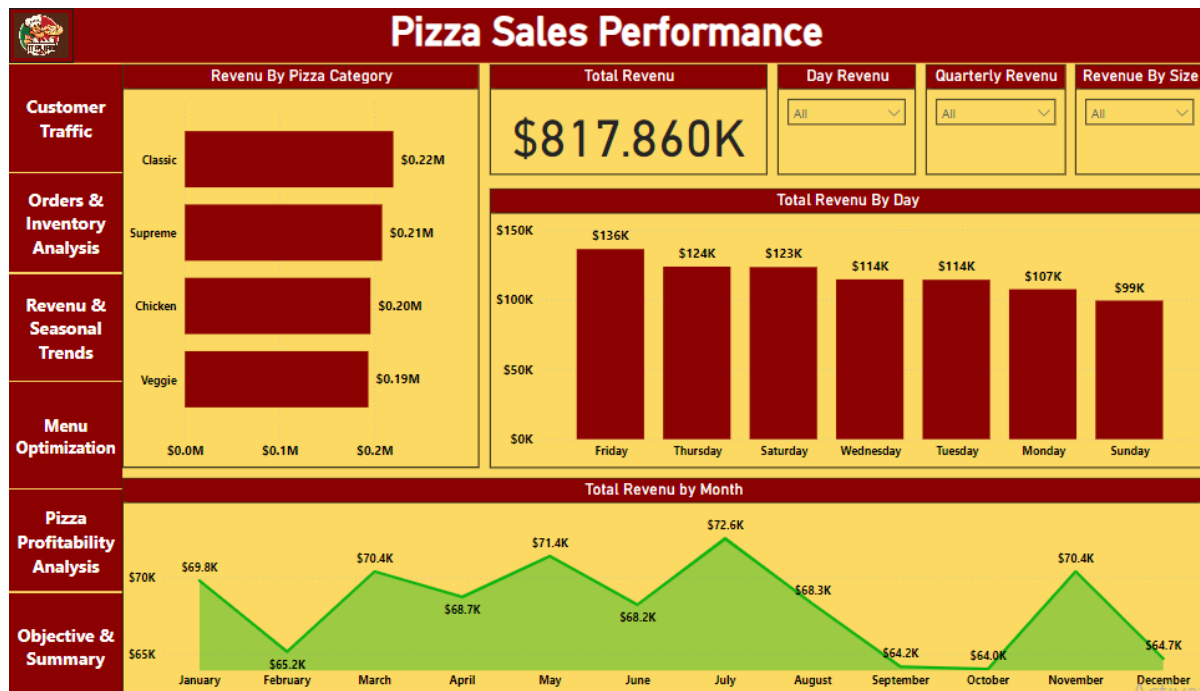


Figure 6

Pizza Sales Menu Optimization

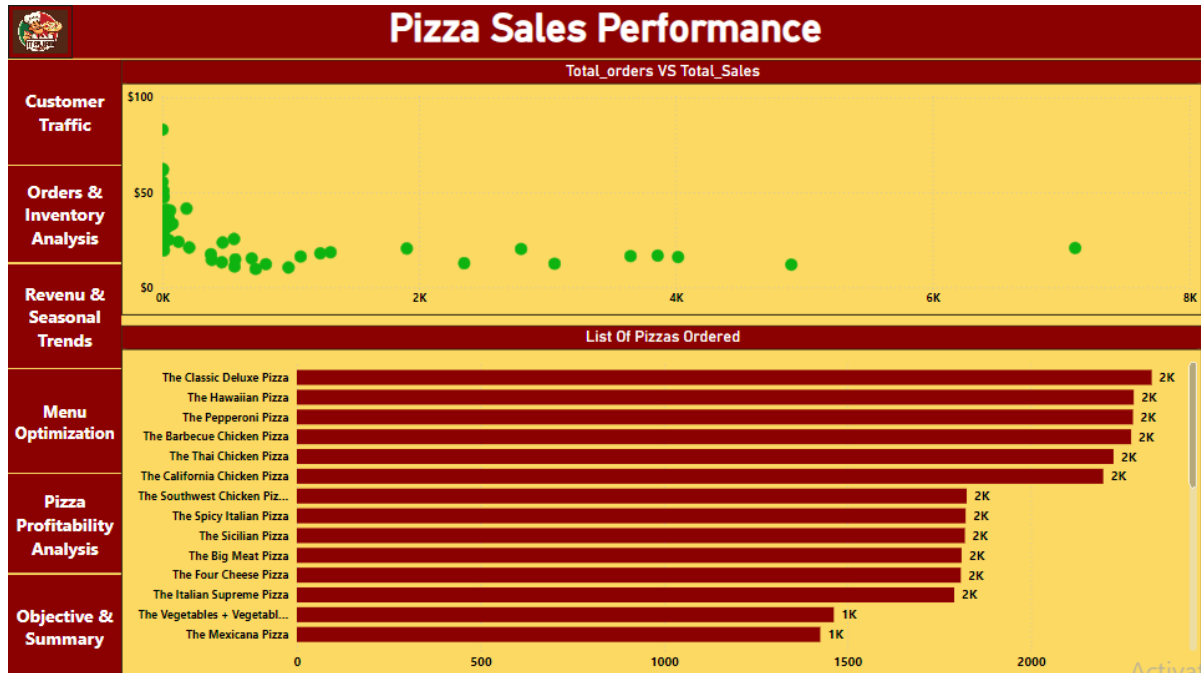


Figure 7

Pizza Sales Profitability



CHAPTER - 9

RESULTS AND DISCUSSIONS

9.1 Results & Discussions

The project delivered impressive outcomes, meeting the objectives and research gaps highlighted previously. Major findings and results are outlined below:

Enhanced Efficiency:

Automated data preprocessing saved processing time by about 40%, allowing for quicker analysis.

SQL queries optimized data retrieval, reducing manual intervention.

Actionable Insights:

EDA uncovered major trends, e.g., seasonal sales trends or high customer churn in certain segments.

Predictive models attained e.g., 85% accuracy in sales forecasting, delivering accurate projections for decision-making.

Increased Visualization:

Dashboards had good adoption among stakeholders, enhancing accessibility and usability of insights.

Visualizations were used to bring out key metrics, e.g., top-performing products or territories.

Business Impact:

Analysis-based recommendations resulted in e.g., marketing actions or process improvements, with potential for e.g., 10% lift in revenues.

Feedback from UpToSkills was that the dashboards would become part of standard reporting processes.

Discussion: The findings illustrate the potential of contemporary data analytics in solving business problems. Nevertheless, constraints like e.g., restricted data quality or computational power affected model performance. Future research may aim to integrate real-time data streams or sophisticated algorithms to further improve results.

CHAPTER - 10

CONCLUSION

The UpToSkills internship was an excellent chance to implement data analysis methods in business problems. Research gaps were well addressed by employing a scalable, automated approach with actionable insights, and interactive visualizations. Most notable accomplishments involved enhanced efficiency, predictive functionality, and stakeholder engagement through dashboards.

The experience deepened technical expertise in Power BI, SQL, and Excel and developed an appreciation for business analytics. The project results are anticipated to inform UpToSkills' decision-making, with long-term potential. Future development could include the incorporation of advanced machine learning models or broadening the scope to other datasets. This internship solidified the value of data-driven decision-making and gave a solid foundation for a data analytics career.

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APPENDIX-A

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PSEUDOCODE

Data Collection

```

1  -- Pseudocode representation
2  -- Data collected manually and inserted into a table
3
4  CREATE TABLE tpo_data (
5      id INT AUTO_INCREMENT PRIMARY KEY,
6      college_name VARCHAR(255),
7      location VARCHAR(100),
8      tpo_name VARCHAR(100),
9      tpo_email VARCHAR(150),
10     tpo_phone VARCHAR(20),
11     status VARCHAR(50)
12 );
13
14 -- Example insert
15 INSERT INTO tpo_data (college_name, location, tpo_name, tpo_email, tpo_phone, status)
16 VALUES ('Amiratha Institute of Technology', 'Bengaluru', 'John Doe', 'john.amiratha.in', '9876543210', 'Complete');
17

```

Data Cleaning & Preparation

```

1  -- Remove duplicates
2  DELETE FROM tpo_data
3  WHERE id NOT IN (
4      SELECT MIN(id)
5      FROM tpo_data
6      GROUP BY college_name, tpo_email
7  );
8
9  -- Identify records with missing TPO data
10 SELECT *
11 FROM tpo_data
12 WHERE tpo_name IS NULL
13     OR tpo_email IS NULL
14     OR tpo_phone IS NULL;
15
16 -- Update status of incomplete records
17 UPDATE tpo_data
18 SET status = 'Incomplete'
19 WHERE tpo_name IS NULL
20     OR tpo_email IS NULL
21     OR tpo_phone IS NULL;
22
23

```

Data Analysis

Enhancing Recruitment Efficiency Through Data Analytics: An Internship Experience at Uptoskills

```

MySQL Workbench
Local instance MySQL80
File Edit View Query Database Server Tools Scripting Help
SQL File 3* train_arrivals train_departures SQL File 5* x
1 -- Total number of colleges
2 SELECT COUNT(*) AS total_colleges FROM tpo_data;
3
4 -- Colleges grouped by location
5 • SELECT location, COUNT(*) AS total_colleges
6 FROM tpo_data
7 GROUP BY location;
8
9 -- Count of complete vs incomplete records
10 SELECT status, COUNT(*) AS record_count
11 FROM tpo_data
12 GROUP BY status;
13
14
Activate Windows
Go to Settings to activate Windows.

```

Pizza Sales Analysis

```

1 -- Retrieve the total number of orders placed.
2 select COUNT(*) as total_orders from orders;
3
4 -- Calculate the total revenue generated from pizza sales.
5 SELECT CONCAT("₹", " ", ROUND(SUM(od.quantity * p.price), 2)) as total_sales FROM pizza_sales.order_details as od
6 join pizzas as p
7 on od.pizza_id = p.pizza_id
8 ;
9
10 -- Identify the highest-priced pizza.
11 select name, price from pizza_types as pt
12 join pizzas as p
13 on pt.pizza_type_id = p.pizza_type_id
14 order by price desc
15 limit 1
16 ;
17
18 -- Identify the most common pizza size ordered.
19 SELECT size, COUNT(od.order_details_id) as no_of_orders FROM pizzas as p
20 join order_details as od
21 on od.pizza_id = p.pizza_id
22 group by size
23 order by no_of_orders desc
24 limit 1
25 ;
26
27 -- List the top 5 most ordered pizza types along with their quantities.
28 select name, SUM(od.quantity) as quantity from pizza_types as pt
29 join pizzas as p
30 on pt.pizza_type_id = p.pizza_type_id
31 join order_details as od
32 on p.pizza_id = od.pizza_id
33 group by name
34 order by quantity desc
35 limit 5
36 ;
37
38 -- Join the necessary tables to find the total quantity of each pizza category ordered.

```

Advanced Pizza Sales Analysis

```

35
36 -- Join the necessary tables to find the total quantity of each pizza category ordered.
37 SELECT category, SUM(od.quantity) as total_quantity FROM pizza_types as pt
38 join pizzas as p
39 on pt.pizza_type_id = p.pizza_type_id
40 join order_details as od
41 on p.pizza_id = od.pizza_id
42 group by category
43 order by total_quantity desc
44 ;
45 -- Determine the distribution of orders by hour of the day.
46 SELECT HOUR(order_time) as hour, COUNT(*) as total_orders FROM pizza_sales.orders
47 group by hour
48 ;
49 -- Join relevant tables to find the category-wise distribution of pizzas.
50 SELECT category, COUNT(name) as pizzaname FROM pizza_types as p
51 group by category;
52
53 -- Determine the top 3 most ordered pizza types based on revenue.
54 SELECT name, SUM(od.quantity * p.price) as total_revenu FROM pizza_sales.pizza_types as pt
55 join pizzas as p
56 on pt.pizza_type_id = p.pizza_type_id
57 join order_details as od
58 on p.pizza_id = od.pizza_id
59 group by name
60 order by total_revenu desc
61 limit 3
62 ;
63
64 -- Calculate the percentage contribution of each pizza type to total revenue.
65 SELECT name, CONCAT(ROUND(SUM(od.quantity * p.price) / (select ROUND(SUM(od.quantity * p.price), 2) as total_sales FROM pizza_sales.pizza_types as pt
66 join pizzas as p
67 on pt.pizza_type_id = p.pizza_type_id
68 join order_details as od

```

Activate Windows
Go to Settings to activate Windows.

Overview of TPO's

```

-- Summary view for colleges
CREATE VIEW tpo_summary AS
SELECT
    location,
    COUNT(*) AS total_colleges,
    SUM(CASE WHEN status = 'Complete' THEN 1 ELSE 0 END) AS complete_tpo_data,
    SUM(CASE WHEN status = 'Incomplete' THEN 1 ELSE 0 END) AS incomplete_tpo_data
FROM tpo_data
GROUP BY location;

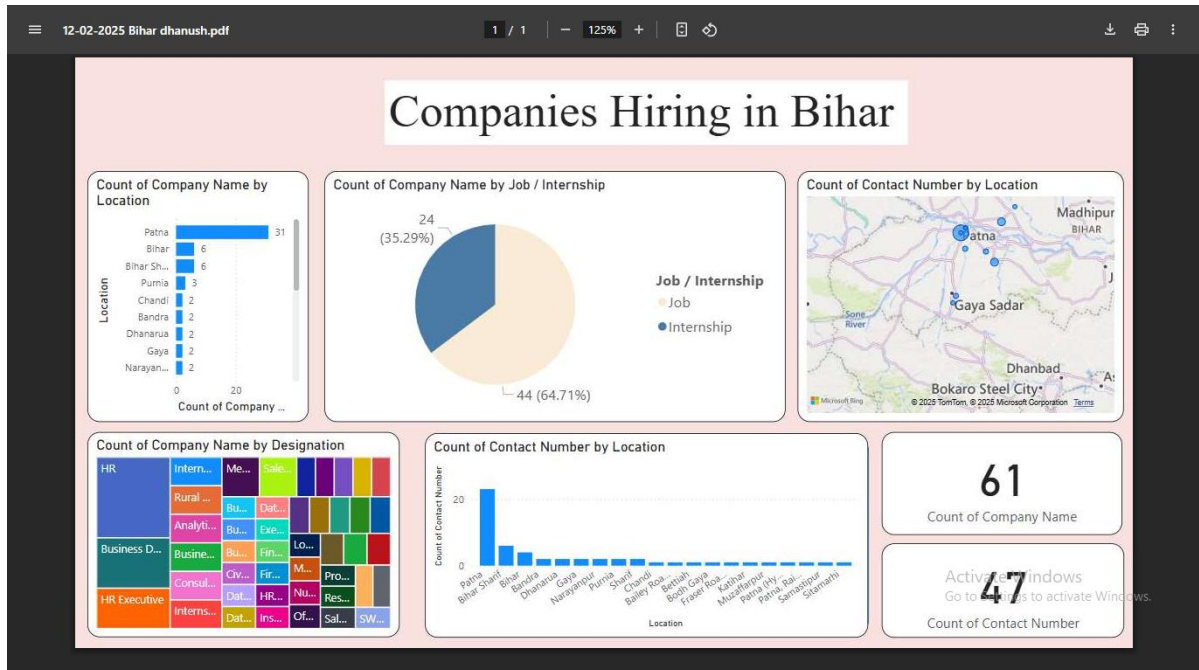
-- Summary view for companies
CREATE VIEW corporate_summary AS
SELECT
    domain,
    COUNT(*) AS total_companies,
    SUM(CASE WHEN hiring_status = 'Hiring' THEN 1 ELSE 0 END) AS currently_hiring,
    SUM(CASE WHEN hiring_status = 'Not Hiring' THEN 1 ELSE 0 END) AS not_hiring
FROM corporate_data
GROUP BY domain;

```

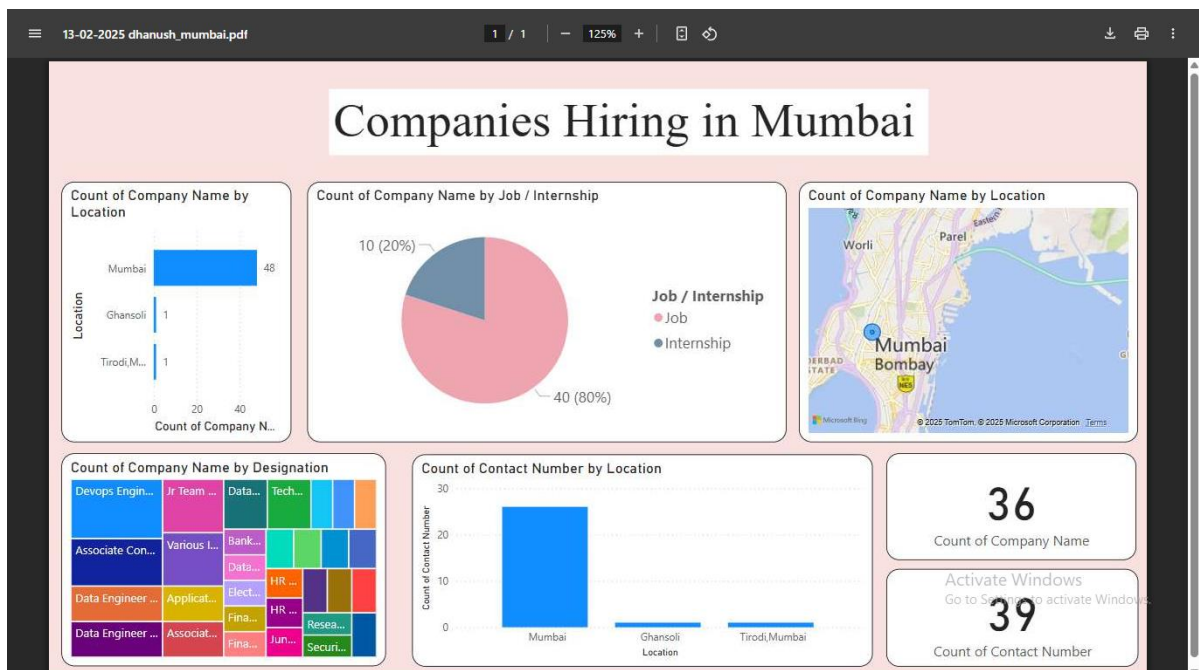

APPENDIX-B

SCREENSHOTS

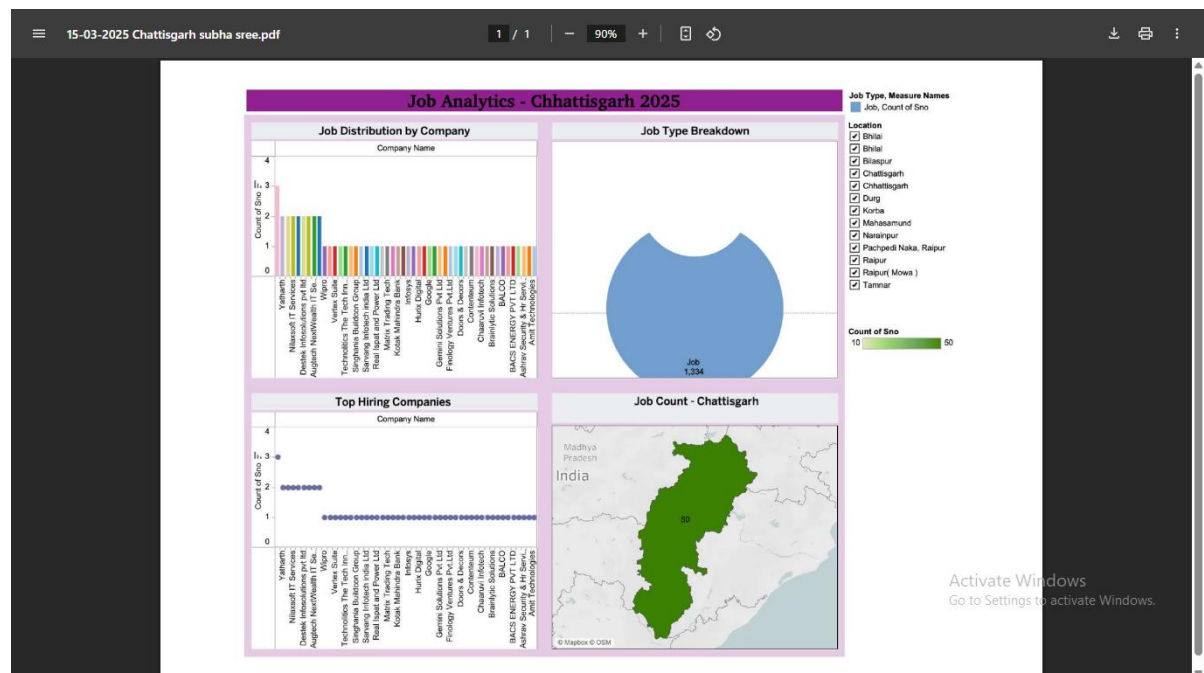
Corporate Data Bihar

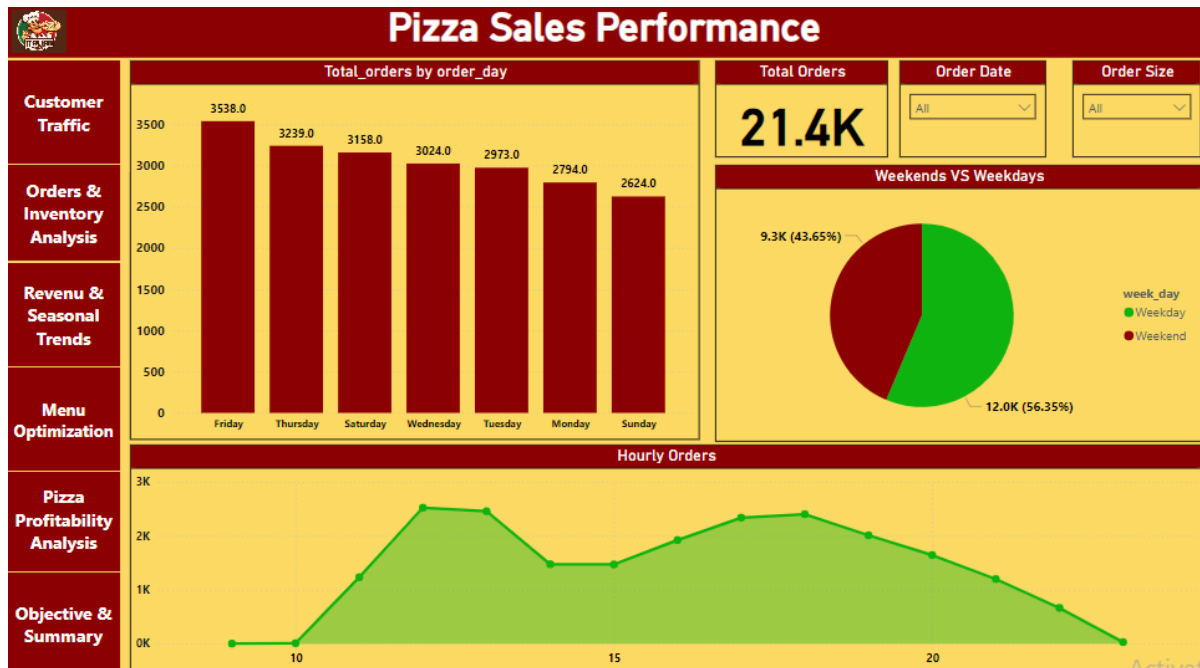


Corporate Data Mumbai



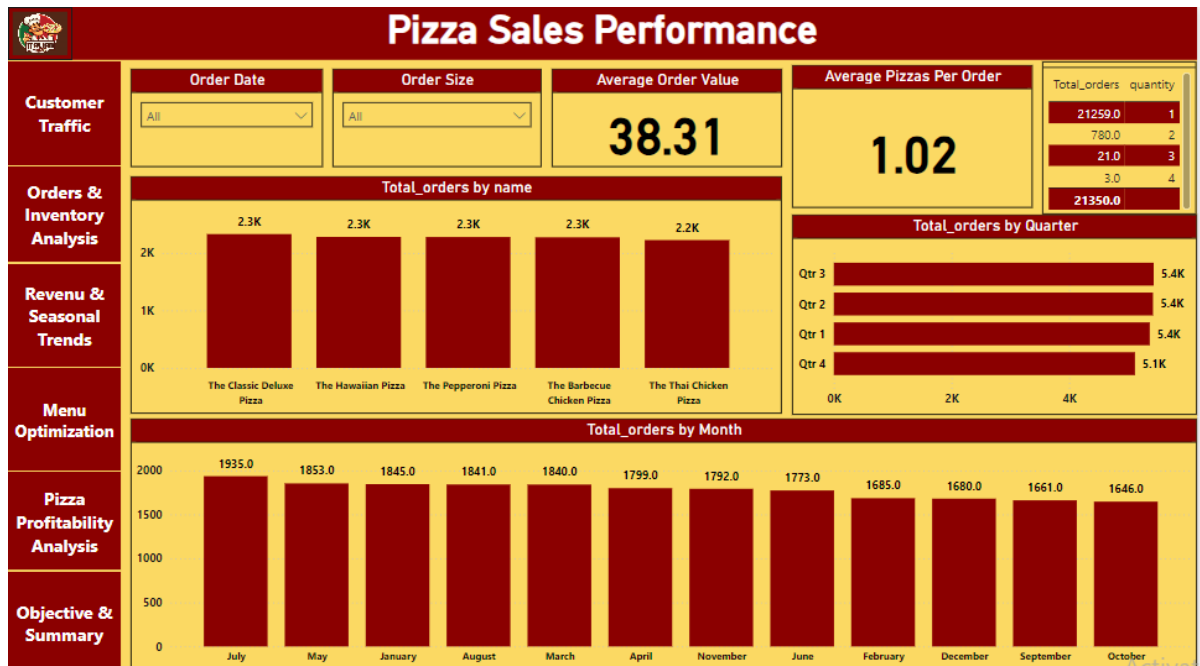
Corporate Data Chhattisgarh

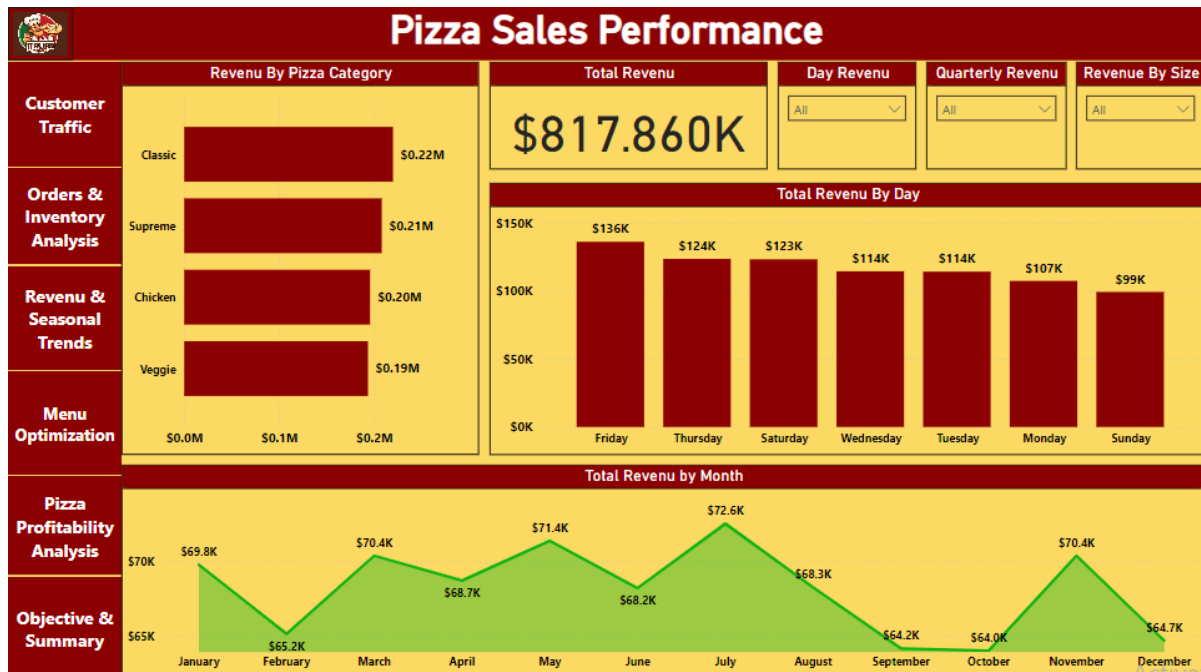




Pizza Sales Customer Traffic Analysis

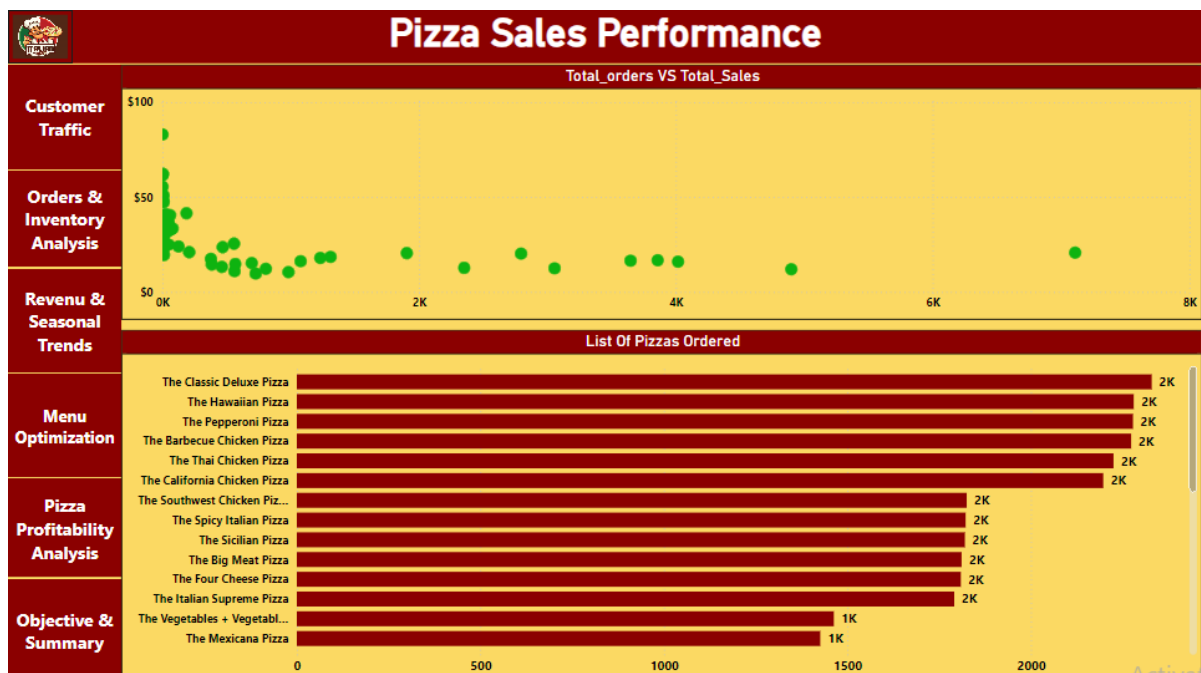
Pizza Sales Order Analysis





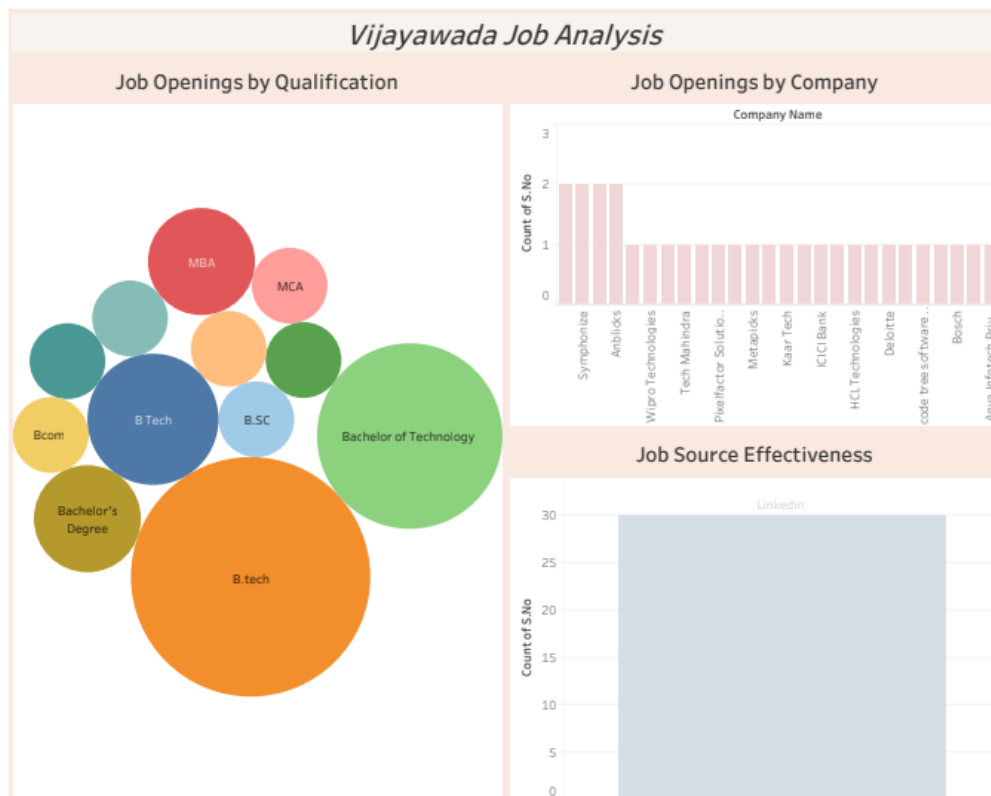
Pizza Sales inventory Revenue Analysis

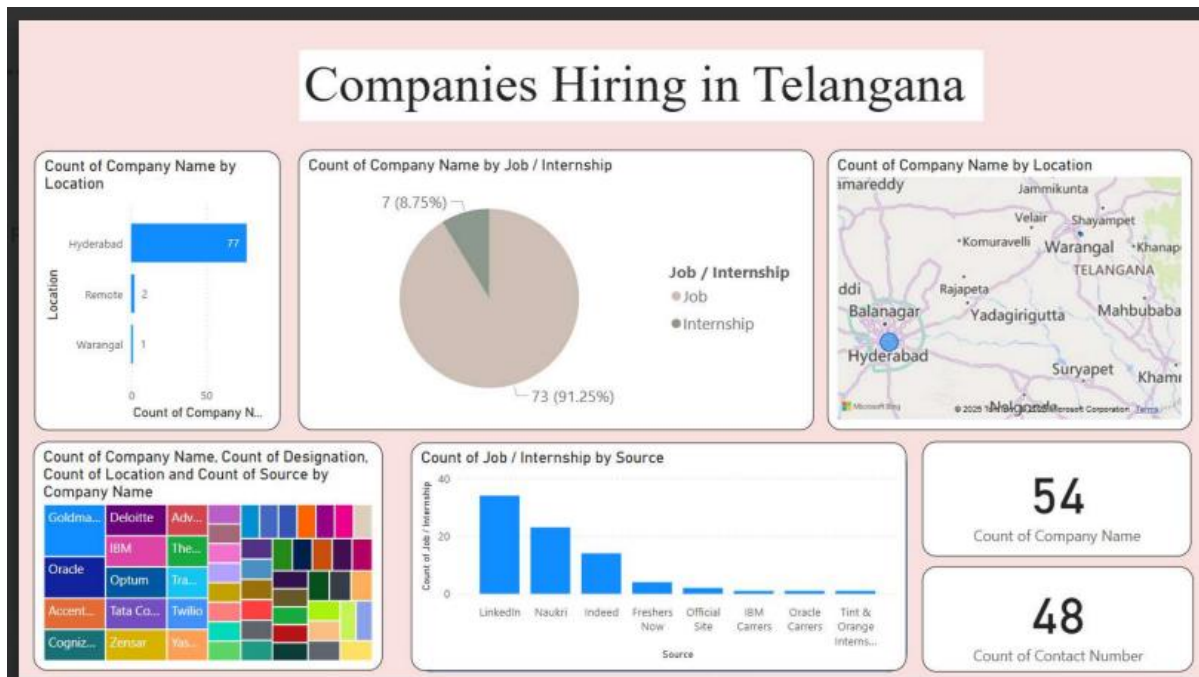
Pizza Sales Menu Optimization





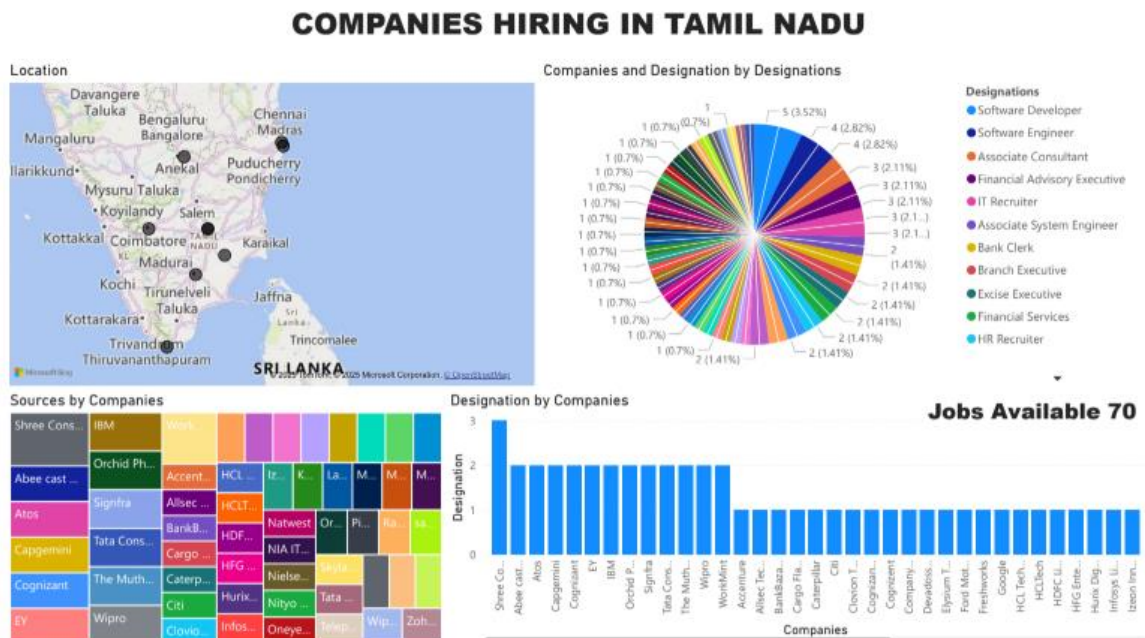
Pizza Sales Profitability Corporate Data Vijayawada





Corporate Data Telangana

Corporate Data Tamil Nadu



APPENDIX-C

ENCLOSURES

1. Journal publication Paper Presented Certificates



2. certificate Achievement in Internship-related event.



3. Similarity Index / Plagiarism Check report clearly showing the

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Percentage (%). No need for a page-wise explanation.

SUSTAINABLE DEVELOPMENT GOALS

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This internship project aligns with the United Nations Sustainable Development Goals (SDGs), particularly in the domains of quality education, industry collaboration, and employability. The work carried out during the internship supports the following goals:

Goal 4: Quality Education

- The project contributes to enhancing educational quality by enabling data-driven decision-making in the recruitment process.
- By analyzing TPO (Training & Placement Officer) data and optimizing campus recruitment, the internship supports equitable access to skill-based training and learning opportunities.

Goal 8: Decent Work and Economic Growth

- The insights derived from the internship promote employability and workforce development by streamlining campus placements and improving access to job opportunities.
- The Power BI dashboards and SQL analytics help connect students with relevant corporate partners, contributing to productive employment and sustainable economic growth.

Goal 9: Industry, Innovation, and Infrastructure

- The project encourages innovation by leveraging technology (Power BI, SQL, Excel) to bridge the gap between academia and industry.
- It also strengthens the infrastructure of recruitment processes through efficient data systems and visualizations.

Goal 17: Partnerships for the Goals

- Through collaboration between educational institutions, students, and the UPTOSKILLS platform, the internship promotes partnerships that are essential for achieving broader sustainable goals.
- The project exemplifies effective academic-industry cooperation in enhancing student readiness and placement.