

Executive summary of the project

This project titled "Exploring the Cosmos :- Analyzing ISRO's mission launches with power BI", was undertaken by our team from Dr. D. S. Deshpande College of Engineering and Technology affiliated with Andhra University.

The project aimed to leverage power BI to analyze and visualize data related to ISRO's space missions.

Learning outcomes:-

- (i) Data visualization
- (ii) Data Analysis
- (iii) Power BI proficiency
- (iv) Team collaborations
- (v) presentation skills

outcomes Achieved:-

- (i) Interactive Dashboard creation
- (ii) Data driven insight
- (iii) Improved technical proficiency
- (iv) effective teamwork
- (v) clear communication skills

Protocols and procedures:-

whether there are clear job roles, and if disciplinary procedures are fair and thorough.

Introduction of the organisation:-

APSCHE (Andhra Pradesh State Council of Higher Education) Smart Internship is aimed at bridging the gap between academics and industry by prioritizing students' careers with hands-on work experience in the form of internships.

Policy of the organisation:-

Internship policies focus on the active engagement in projects, adherence to professional standards and participation in growth.

Future plans of the organization:-

Future plans include expanding partnerships, introducing new programs, enhancing digital infrastructure, and building a strong aluminum network.

ACTIVITY LOG FOR THE FIRST WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Orientation, setup of power BI environment	Familiarity with Power BI interface and tools.	
Day - 2	Introduction to the data lifecycle	Understanding the stages from data collection to analysis	
Day - 3	Overview of data sources relevant to the internship	Identifying and accessing relevant data sources	
Day - 4	Basic data import and exploration in power BI	Ability to import data and perform initial exploration	
Day - 5	Recap and Q & A	Clarified doubts and reinforced concepts.	
Day - 6			

ACTIVITY LOG FOR THE FIRST WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-charge Signature
Day - 1	Introduction to data cleaning technique	Understanding the importance of clean data	
Day - 2	Hands-on data cleaning using pure Query	Ability to clean and prepare data using pure	
Day - 3	Handling missing data and outliers	Techniques to manage and mitigate data quality issue	
Day - 4	Data transformation technique	Applying transformation like normalizations and aggregations	
Day - 5	Summary of the week's learnings	Applying and understanding the concepts of data preparation	
Day - 6			

ACTIVITY LOG FOR THE FIRST WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Introduction to data visualization concept	Basic of effective data visualization	
Day - 2	Creating basic visualization in power BI	Ability to create charts, graphs, and visual reports	
Day - 3	Building interactive dashboards	Developing dashboards for data exploration	
Day - 4	Exploratory data Analysis (EDA)	Gaining insights through visual data exploration	
Day - 5	Review and feedback on dashboards.	Improving visualizations based on feedback	
Day - 6			

ACTIVITY LOG FOR THE FIRST WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Introduction to DAX (Data analysis expressions)	Understanding and applying DAX for advanced calculation	
Day - 2	Statistical techniques for trend analysis	Ability to analyze trends and patterns in data	
Day - 3	Building predictive models	Basics of predictive analytics in Power BI	
Day - 4	Incorporating advanced analytics in dashboards	Enhancing Dashboards with predictive insights	
Day - 5	Recap and practise sessions	Solidifying advanced analytical skills.	
Day - 6			

ACTIVITY LOG FOR THE FIRST WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Introduction to performance optimization	understanding factors that impact data	
Day - 2	Performance testing with large datasets	Techniques to handle and optimize large data sets	
Day - 3	Performance tuning in power BI	Reducing query load and optimizing refresh	
Day - 4	streaming dashboard for better user experience	Creating faster, more responsive dashboards	
Day - 5	finalizing optimized dashboards	completed a set of high-performance dashboards	
Day - 6			

ACTIVITY LOG FOR THE FIRST WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Introduction to real-world datasets and challenges	Understanding the complexity of real-world data	
Day - 2	Identifying data quality issues	Techniques to diagnose and address data	
Day - 3	Hands-on practice with a messy dataset	Experience in cleaning and transforming	
Day - 4	Case study Analysis	Applying learned skills to a real-world scenario	
Day - 5	Practical case study analysis	Practical experience in end-to-end data analysis	
Day - 6			

ACTIVITY LOG FOR THE FIRST WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Introduction to reporting best practices	Understanding the principle of effective data	
Day - 2	Developing detailed reports in power BI	Ability to create comprehensive and clear reports	
Day - 3	Documenting analysis and findings	Techniques for thorough and clear documentation	
Day - 4	Data storytelling and presentation skills	Crafting compelling narratives from data	
Day - 5	Finalizing reports and documentation	Completed professional-level reports and documentation	
Day - 6			

ACTIVITY LOG FOR THE FIRST WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Finalizing the end-to-end projects	Bringing together all skills in a cohesive project	
Day - 2	Preparing the project presentation	effective presentation techniques for showcasing data work	
Day - 3	Dry run of the presentation	Practice delivering a polished and professional presentation.	
Day - 4	Delivering the final presentation	practice delivering a polished and professional presentation	
Day - 5	Feedback and reflection	Receiving feedback and reflecting on the learning journey	
Day - 6			

WEEKLY REPORT

WEEK - 1 (From Dt..... to Dt.....)

Objective of the Activity Done:

Detailed Report:

The first week was dedicated to laying the foundation for the internship by introducing fundamental concepts in data analytics and familiarizing the team with the power BI environment.

The focus was on understanding the data lifecycle from collection to analysis, and getting hands-on experience with data import and initial exploration using power BI.

- * Orientation and setup of the Power BI workshop
- * Learning about the data lifecycle, including data collection, storage, processing, and analysis.
- * Identification and exploration of the data source that would be used throughout the internship.

WEEKLY REPORT

WEEK - 1 (From Dt..... to Dt.....)

Objective of the Activity Done:

Detailed Report:

Week 2 focused on one of the most critical aspects of data analytics - data cleaning and preparation. The team learned how to use Power Query within Power BI to clean, transform, and prepare data for analysis. This involved dealing with missing data, outliers and ensuring that data types were consistent and ready for more advanced analysis.

WEEKLY REPORT

WEEK - 1 (From Dt..... to Dt.....)

Objective of the Activity Done:

Detailed Report: Week 3, the third week was dedicated to learning how to create effective data visualizations and conducting exploratory data analysis (EDA).

The team focused on building interactive dashboard in power BI.

which interactive dashboards allowed them to visually explore data and uncover initial insights.

This week was crucial for developing the ability to communicate data.

WEEKLY REPORT

WEEK - 1 (From Dt..... to Dt.....)

Objective of the Activity Done:

Detailed Report:

In week 4, the focus shifted to more advanced analytics techniques. The team was introduced to DAX (Data-Analysis expressions) for performing complex calculation and learned about applying statistical methods for trend analysis. They also explored the basic of predictive modeling enhancing their ability to derive deeper insights for data.

WEEKLY REPORT

WEEK - 1 (From Dt..... to Dt.....)

Objective of the Activity Done:

Detailed Report:

Week-5

It was all about optimizing the performance of data models and dashboards. The team learned how to handle large datasets.

Efficiently and performed tuning on their power BI dashboards.

This week emphasized the importance of creating fast, responsive, and user-friendly analytics solution.

Understanding the factors that impact the performance of data models.

WEEKLY REPORT

WEEK - 1 (From Dt..... to Dt.....)

Objective of the Activity Done:

Detailed Report:

Week .6 .

This week introduced the team to the complexities of working with real-world datasets. The focus was on applying the skills they had learned to tackle real-world data challenges, including dealing with messy and incomplete data. We also worked on a mini project by case study that simulated real world scenarios.

* peer review and feedback sessions to refine their approach and solutions.

WEEKLY REPORT

WEEK - 1 (From Dt..... to Dt.....)

Objective of the Activity Done:

Detailed Report:

Week 1:

It was dedicated to the creation of comprehensive reports and proper documentation and analysis process.

The team focused on summarizing their findings, developing detailed reports in power BI, and documenting their analysis in a structured and clear manner. Thus week emphasized *

The importance of effective communication in data analytics.

WEEKLY REPORT

WEEK - 1 (From Dt..... to Dt

Objective of the Activity Done:

Detailed Report:

The final week was dedicated to bringing together all the skills and knowledge the team had acquired throughout the internship. They finalized the end-to-end project, prepared a presentation to showcase their work, and delivered it to an audience. This week was the culmination of the internship, providing a platform for the team to demonstrate their expertise.

By the end of this week, the team successfully completed their internship project, demonstrating a comprehensive understanding of data analytics.

CHAPTER 6: OUTCOMES DESCRIPTION

Describe the work environment you have experienced (in terms of people interactions, facilities available and maintenance, clarity of job roles, protocols, procedures, processes, discipline, time management, harmonious relationships, socialization, mutual support and teamwork, motivation, space and ventilation, etc.)

Facilities:-

Whether the workplace is clean, has good ventilation, and has the right amount of space and seating ..

you can also consider whether the equipment is well-maintained, and if there are any obstructions in the floors or traffic routes .

people interactions:-

Whether the environment encourages collaboration and creativity , and if employees feel appreciated and understood. you can also consider whether there is open communication, and if employees can provide feedback and suggestions.

Describe the real time technical skills you have acquired (in terms of the job-related skills and hands on experience)

Throughout this internship, I have developed and refined several key managerial skills that are essential for effective leadership and project management.

⇒(i) Team leadership :-

I learned how to lead a team effectively by setting clear goals, delegating tasks, and motivating team members.

⇒(ii) Project management :-

I gained experience in planning, executing, and overseeing a project from start to finish.

This included setting timelines, tracking progress, and ensuring that project was completing within scope on time.

Describe the managerial skills you have acquired (in terms of planning, leadership, team work, behaviour, workmanship, productive use of time, weekly improvement in competencies, goal setting, decision making, performance analysis, etc.

During this internship, I gained several valuable real-time skills that are critical for both data analytics and professional growth.

Here are the key skills I developed

- (i) Data analytics and interpretation
- (ii) Power BI proficiency
- (iii) Critical thinking and problem solving.

Describe how you could improve your communication skills (in terms of improvement in oral communication, written communication, conversational abilities, confidence levels while communicating, anxiety management, understanding others, getting understood by others, extempore speech, ability to articulate the key points, closing the conversation, maintaining niceties and protocols, greeting, thanking and appreciating others, etc.,)

Communication plays a key role in professional growth and effective team work.

(i) Active listening:-

Active listening reduces misunderstandings and help build a stronger, more collaborative relationships.

(ii) clear and concise communication:-

This ensures that your message is easily understood, reducing the risk of misinterpretation.

(iii) feedback reception:-

constructive feedback helps us continuously refine our communication skills and fosters a culture of open dialogue.

Describe how could you could enhance your abilities in group discussions, participation in teams, contribution as a team member, leading a team/activity.

Enhancing our abilities in group discussions and leading a team requires a combination of interpersonal skills, strategic thinking, and self-awareness. Some strategies include,

(i) Setting clear goals :-

As a team leader, setting clear goals and communicating them effectively to your team.

(ii) Delegation :-

Identify strengths and skills of each team member and delegates tasks accordingly. Trust your team members to take ownership of their responsibilities.

Describe the technological developments you have observed and relevant to the subject area of training (focus on digital technologies relevant to your job role)

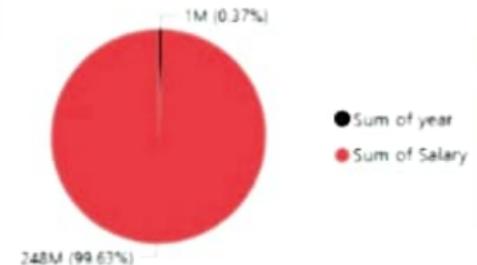
During the project several technological developments and tools were utilized and explored to effectively analyze ISRO's mission launches using Power BI.

These advancements played a crucial role in ensuring that the project was completed successfully and that the insights generated were both accurate and valuable.

- (i) Power BI for visualization of Datasets.
- (ii) Integration of multiple Datasets from different sources.
- (iii) Advanced Analytical techniques (DAX)
- (iv) Interactive Dashboard designs.

OPTIMIZING PLACEMENTS

YEAR BASED SALARY

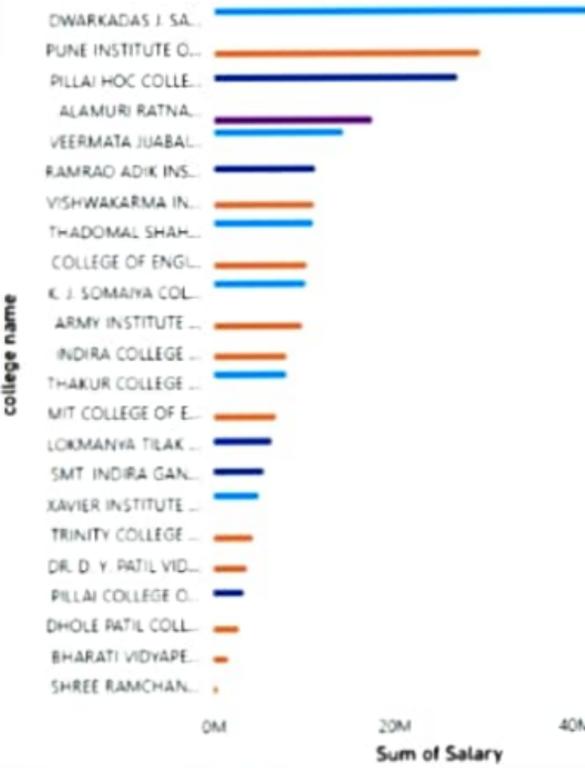


ANALYSIS OF REGION

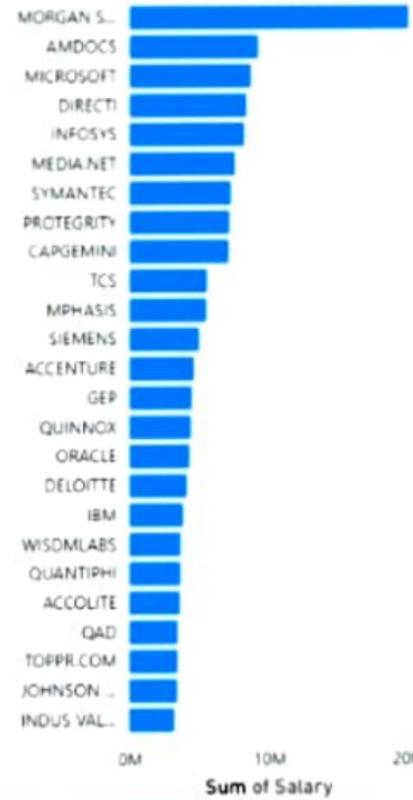


ANALYSIS OF COLLEGE BASED SALARY

region ● MUMBAI ● NAVI MUMBAI ● PUNE ● THANE

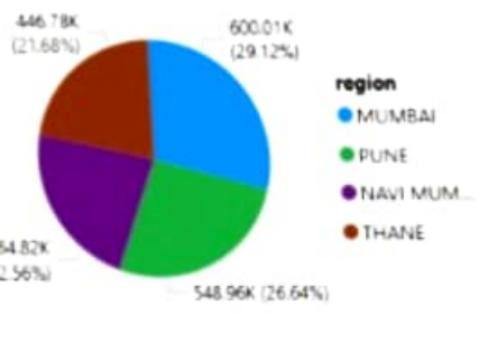


ANALYSIS OF COMPANY BASED SALARY



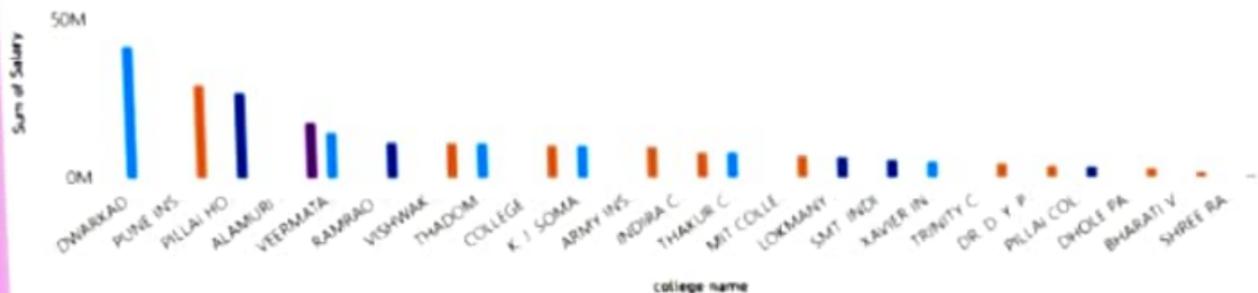
OPTIMIZING PLACEMENT STRATEGIES

gion and salary.

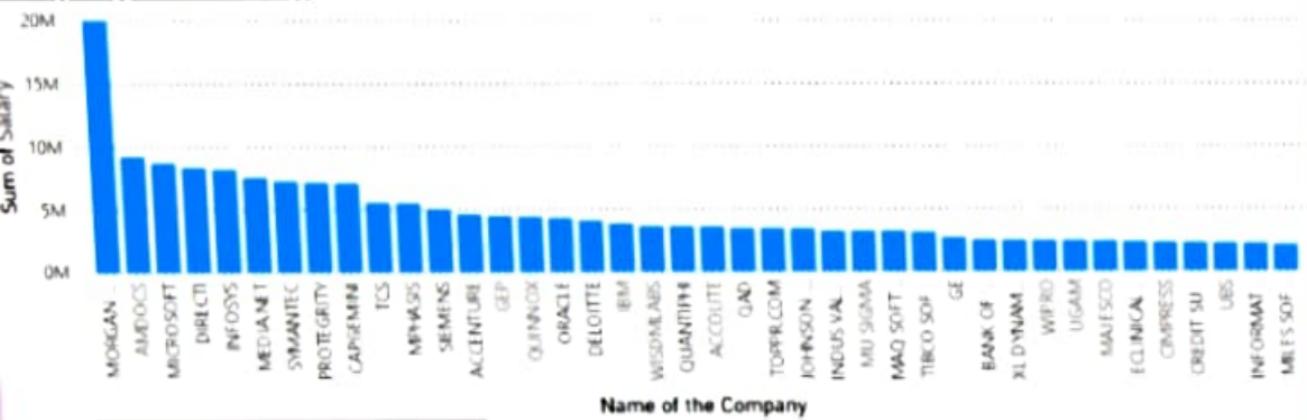


College Name and Region

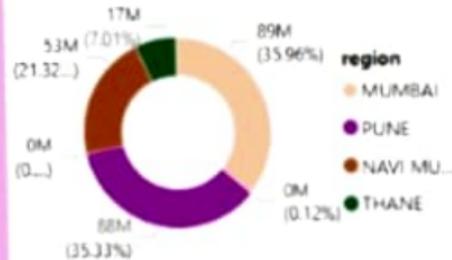
region ● MUMBAI ● NAVI MUMBAI ● PUNE ● THANE



Company and salary

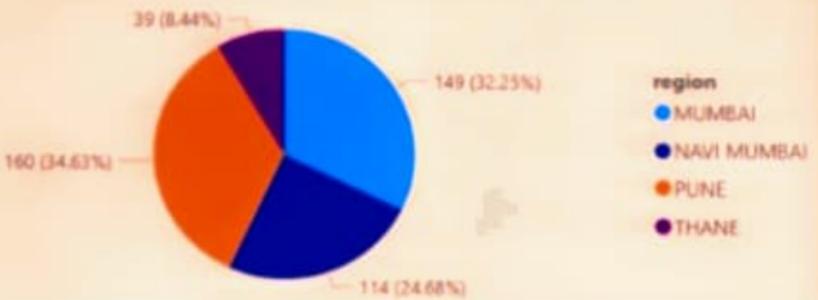


Year and Salary by Region

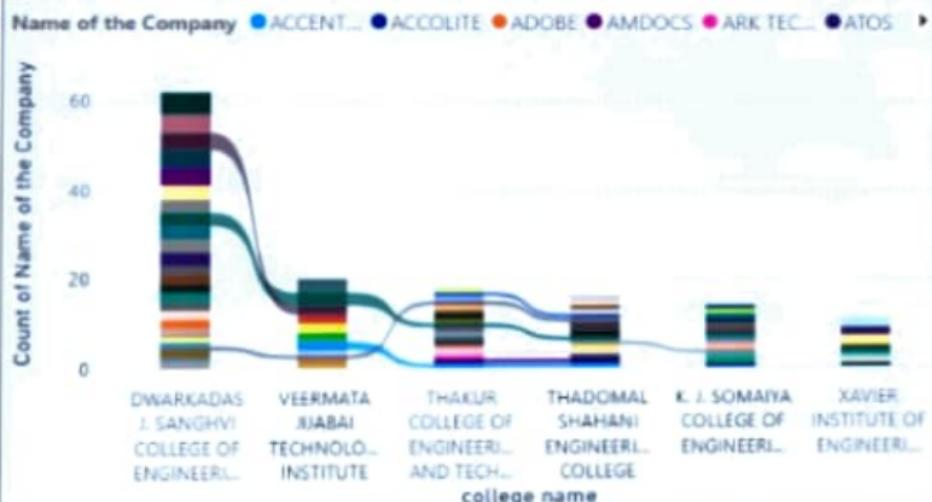


Optimizing Placement

Count of region by region



Count of Name of the Company by college name and Name of the Company



Sum of Salary by Name of the Company



Sum of year by college name

