# SHORT-TERMINTERNSHIP

## Dr. LANKAPALLI BULLAYYA COLLEGE
## VISAKHAPATNAM

# Contents

1:EXECUTIVESUMMARY
2:OVERVIEWOFTHEORGANIZATION
3:INTERNSHIPPART
4:ACTIVITYLOGFORTHEEIGHTWEEKS
5:WEEKLYREPORTS
6:OUTCOMESDESCRIPTION
7: PHOTOS & VIDEO LINKS

## Acknowledgements

I would sincerly like to thank APSCHE for providing me this short-term internship which helped me gain practical experience and knowledge on Data Analytics.

I would like to thank our principal sir, Dr. G.S.K. chakravarthy for giving me this wonderful opportunity.

I would also like to thank our head of the Department Miss. Hymavathi mam, Department of BSc computer science and our guide K. Mrudula praveena mam for being a wonderful mentor throughout my project.

I thank my lecturers, mentors and my friends who helped me to do this project. Without them this project would not have been completed.

**This page content gives an idea only, which topics have to write.**

## 1: EXECUTIVE SUMMARY

The internship report shall have a brief executive summary. It shall include five or more Learning Objectives and Outcomes achieved, a brief description of the sector of business and intern organization and summary of all the activities done by the intern during the period.

## 2: OVERVIEW OF THE ORGANIZATION

**Suggestive contents**

A. Introduction of the Organization
B. Vision, Mission, and Values of the Organization
C. Policy of the Organization, in relation to the intern role
D. Organizational Structure
E. Roles and responsibilities of the employees in which the intern is placed.
F. Performance of the Organization in terms of turnover, profits, market reach and market value.
G. Future Plans of the Organization.

## 3: INTERNSHIP PART

*Description of the Activities/Responsibilities in the Intern Organization during Internship, which shall include - details of working conditions, weekly work schedule, equipment used, and tasks performed. This part could end by reflecting on what kind of skills the intern acquired.*

# CHAPTER 1: EXECUTIVE SUMMARY

## Description of the sector of business & Intern Organization

Smartbridge operates in the data analytics sector providing innovative solutions to enhance business intelligence. The organization leverages power with actionable insights, enabling data-driven decision-making.

## Learning Objectives and Outcomes

1) understand Power BI fundamentals
2) Data modeling
3) Proficiency in Power BI tools
4) Data vis cleaning & transformation
5) Data visualization
6) Report Design and sharing

## Summary of Internship Activities:

1) Attending live training sessions and project-mentoring sessions.
2) selection of topic - "Analysis of election in India" and gathering, cleaning and analyzing its related datasets in excel.
3) Team formation and assignment of tasks to team members.
4) Designing & developing interactive dashboards, story, report on project using Power BI.
5) Drafting a project video demonstration and Preparation of final report.

## chapter-2 : overview of the Organization

Smart Bridge is a platform that offers virtual internship to the students. The platforms goal is to prepare students for the job market by establishing a cooperative relationship between industry & Academic. Smart Bridge partners with companies such as google to offer virtual internships. The internships provide students with hands on experience with the latest technologies and enable project based learning. Smart Bridge's flagship event is the "Summer internship program". The program develops students skills in emerging technologies ie 1) Artifical Intelligence 2) Machine learning 3) Internet of things.

### organization's objective :

Smart Bridge's main objective is to bridge the existing gaps between prevailing industry standards and what the academics offers to the graduates while passing out of university. Smart Bridge offers suitable skill development & training to the young talent before on boarding their first job. Their skill development programs are designed considering the present in demand skills in the industry. We thereby work along the line to offer best programs that helps

the students to gain practical knowledge and hands on train training to learn skills of these future. Therefore the main objectives of Smart bridge is providing internship for every student promote industry approved professional electives become a talent factory of India by 2026.

Chapter-3 : Internship part

Description of the Activities / responsibilities Undertaken

1) Registering the with APSCHE smart internship enrolling for Smart bridge's data analytics course ie live training sessions as per the pre-scheduled training calender.

2) Participating weekly quiz & completing weekly assignment with respect to data ~~atan at~~ analytics.

3) Gathering Team formation & detection of project topic - " Analysis of election in India"

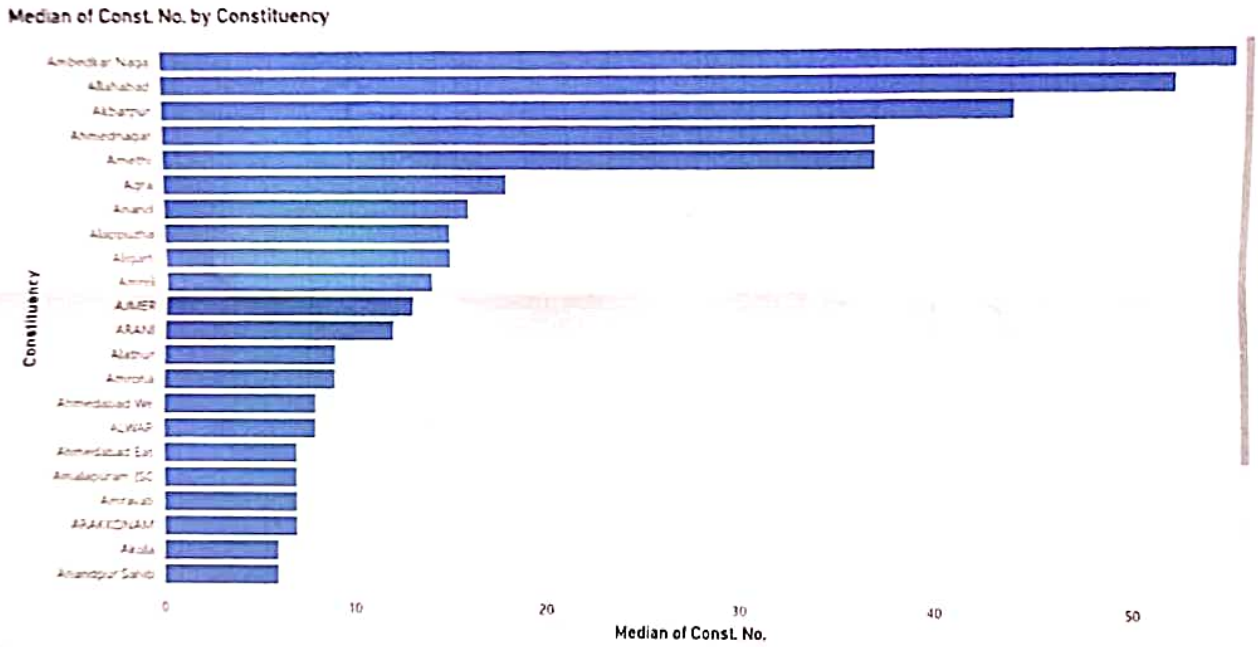
4) Gathering, cleaning & analyzing the excel data sets of the project topic - " Analysis of election in India"

5) Attending project - mentoring sessions and designing and developing interactive dashboard Report on the project topic using power BI.

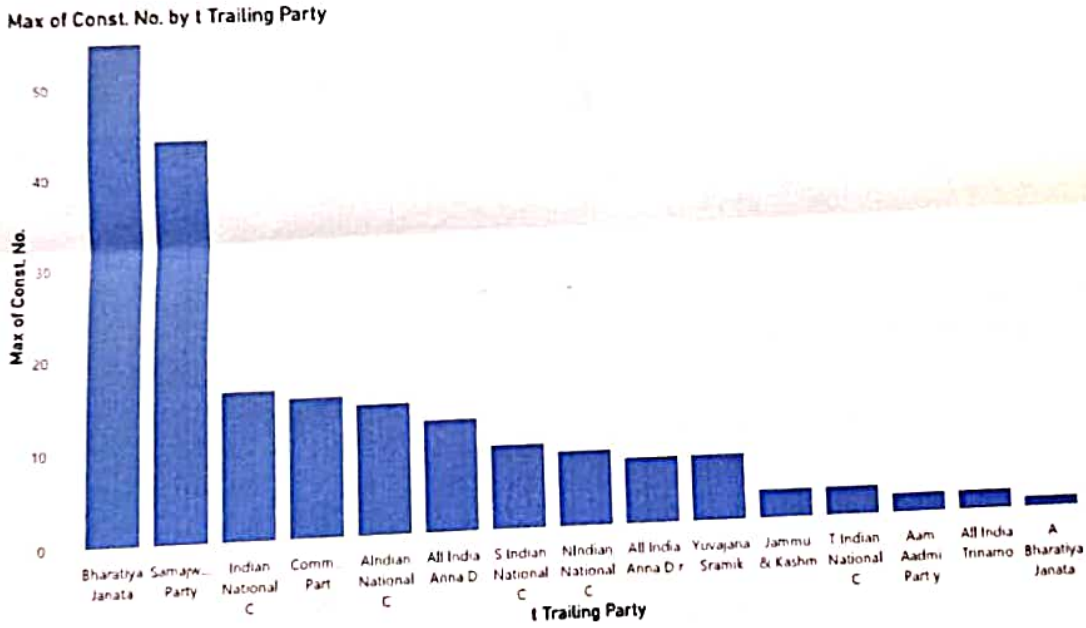
6) web integration of above project deliverables with team's webpage using visual studio code, Drafting a project video demonstration and preparation of final report.

7) Submission of team project via uploading the project files in Github Repository of the team.

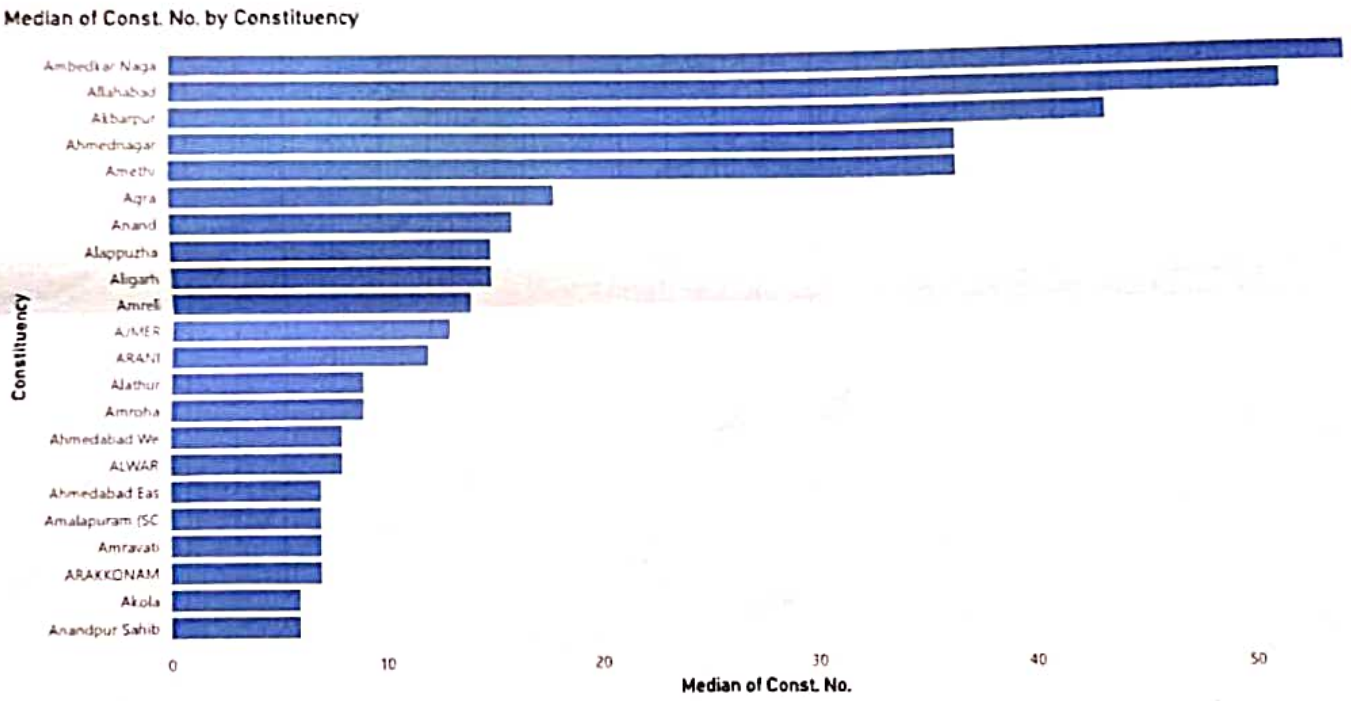
## *WHAT IS THE MEDIAN OF CONTITUENCY NO BY CONSTITUENCIES*



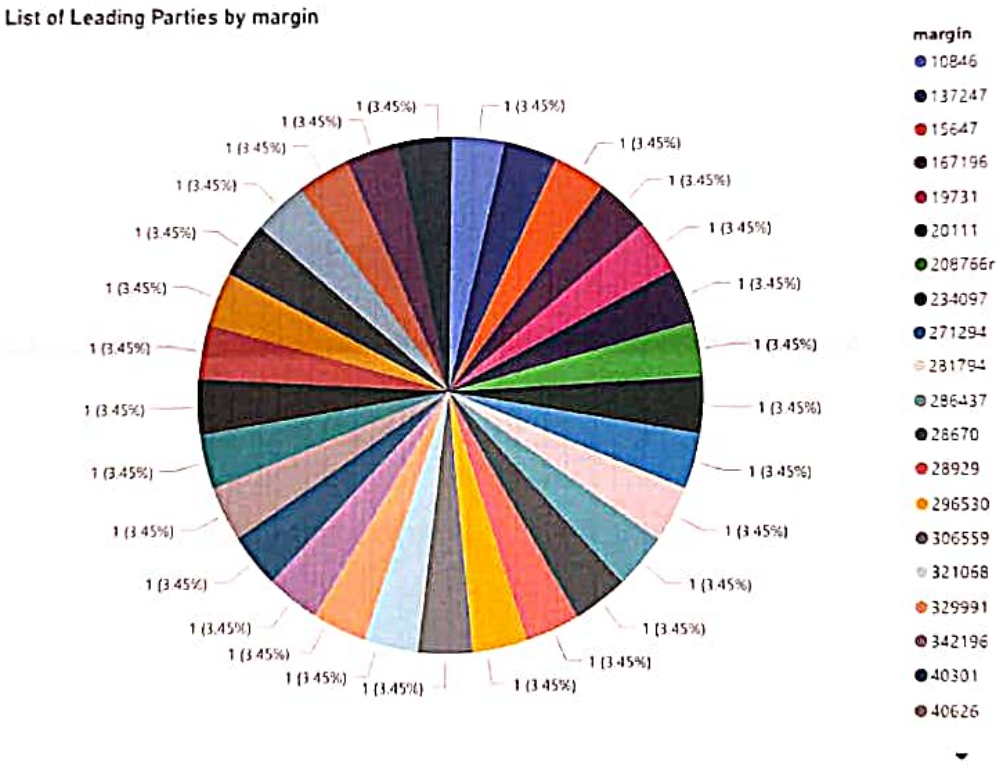
## WHAT IS THE MAXIMUM CONSTITUENCY NO BY TRAILING PARTIES



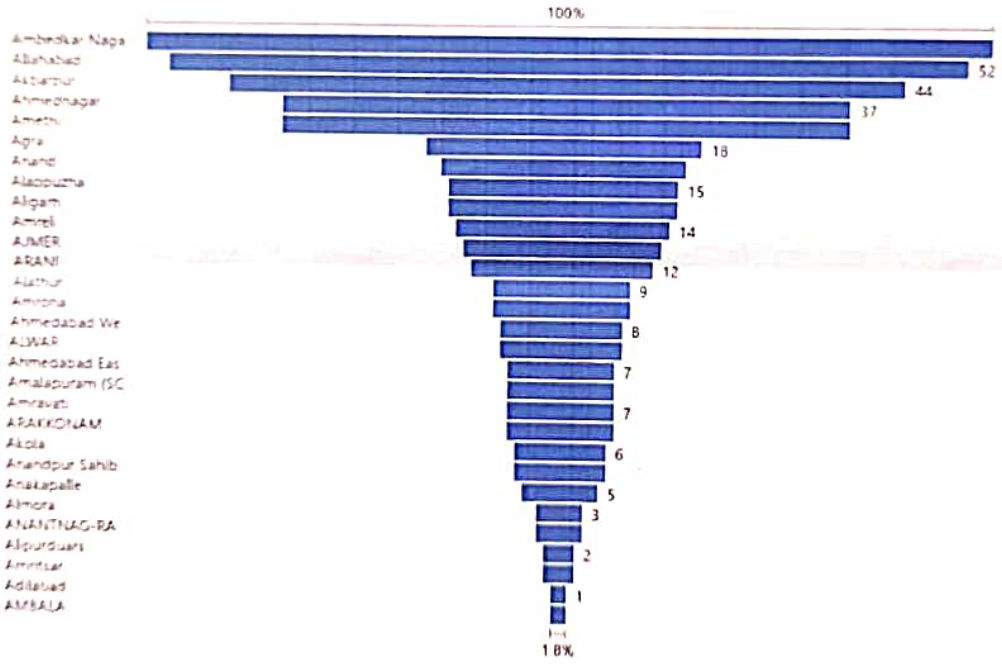
## *WHAT IS THE MEDIAN OF CONTITUENCY NO BY CONSTITUENCIES*



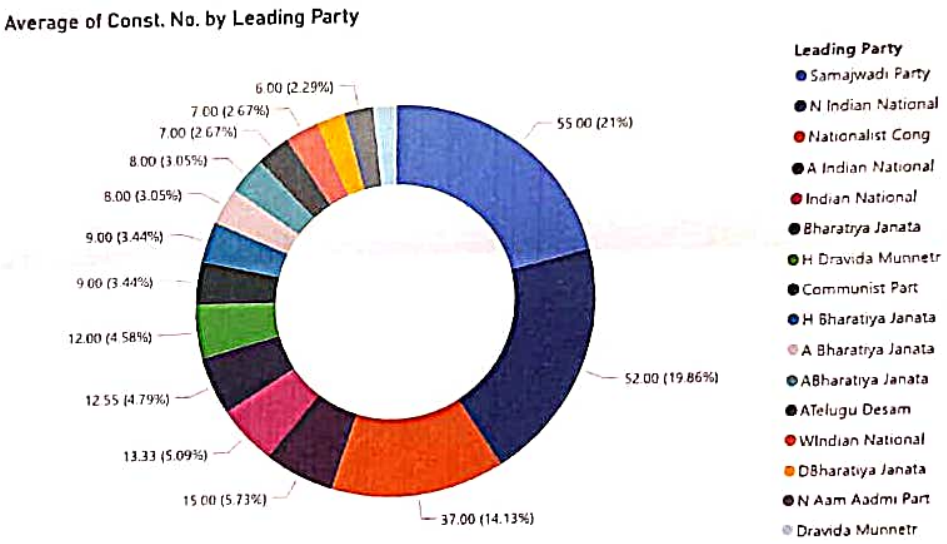
# *LIST OF LEADING PARTIES BY MARGIN OF SEATS*



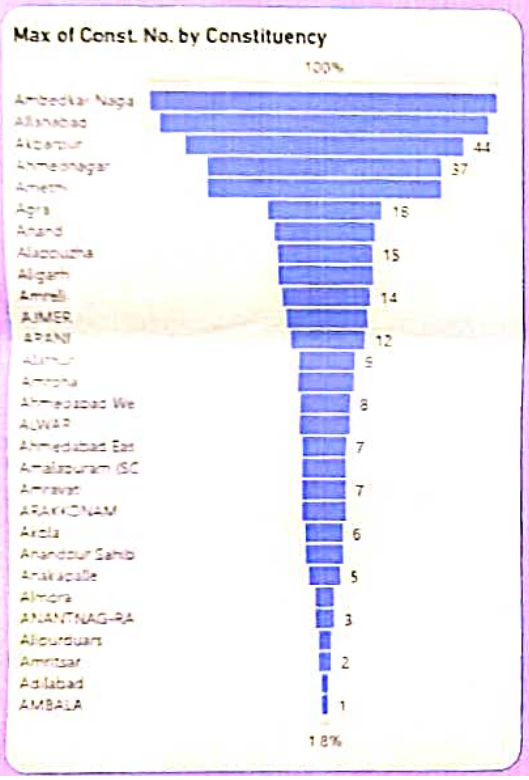
## *WHAT IS THE MAXIMUM OF CONTITUENCY NO BY CONSTITUENCIES*

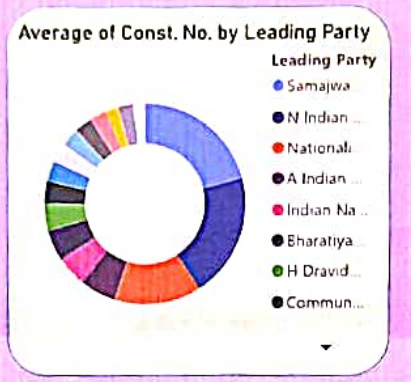


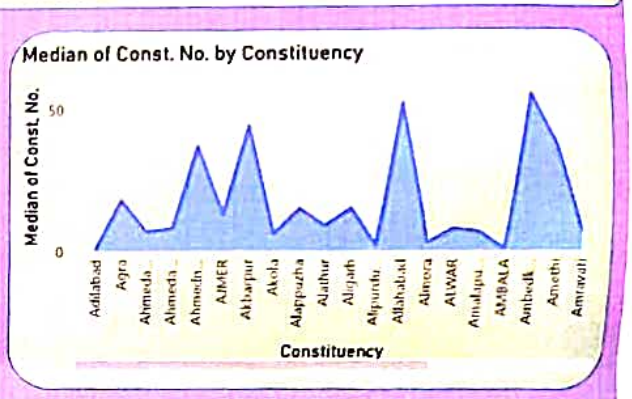
## *WHAT IS THE AVERAGE OF CONSTITUENCY NO BY LEADING PARTIES*

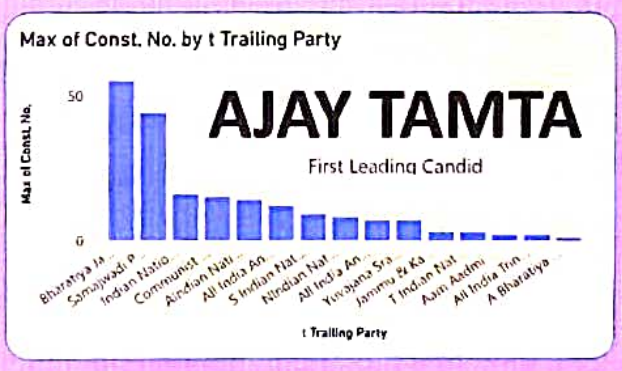


# ANALYSIS OF ELECTION RESULTS IN INDIA

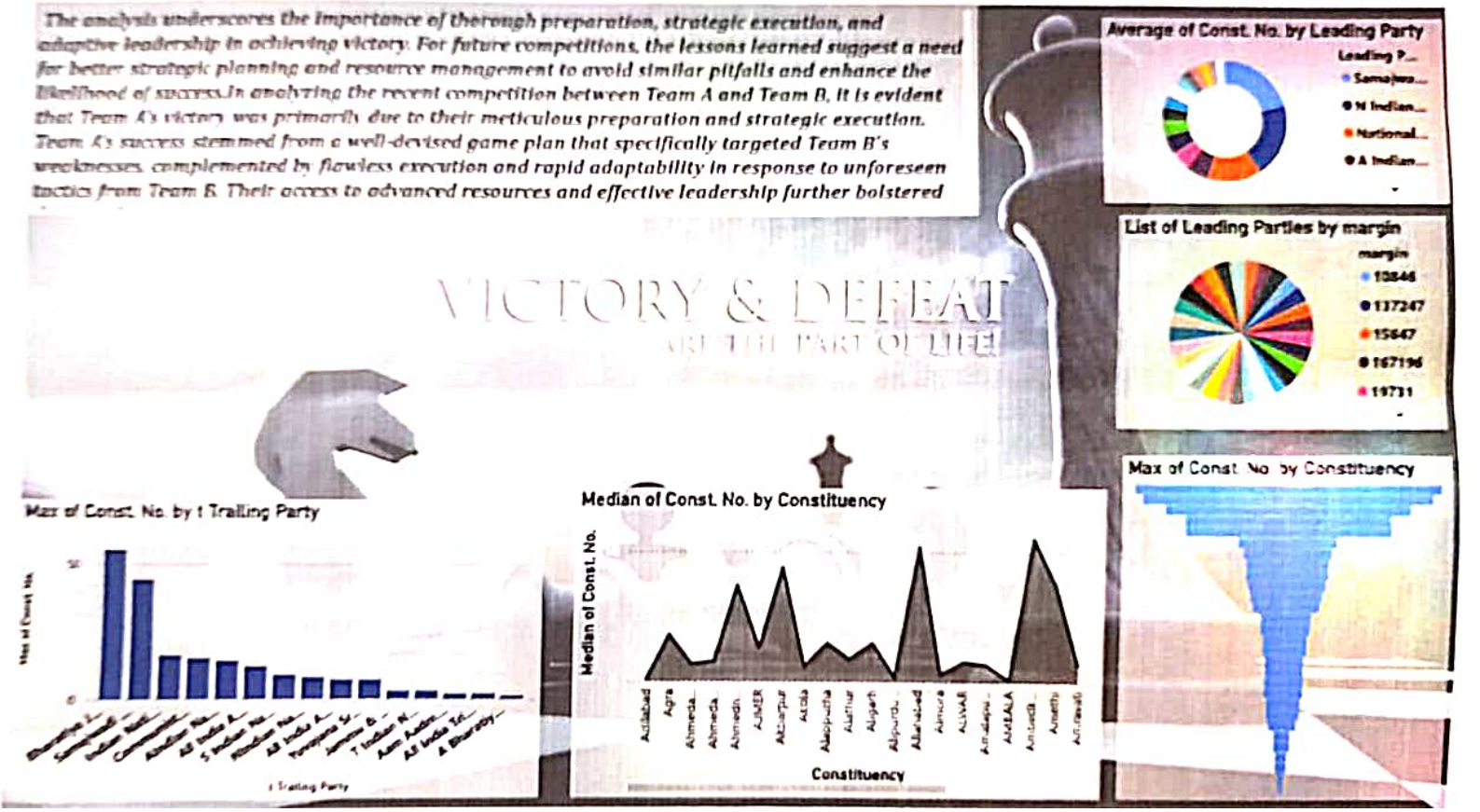


*The analysis underscores the importance of thorough preparation, strategic execution, and adaptive leadership in achieving victory. For future competitions, the lessons learned suggest a need for better strategic planning and resource management to avoid similar pitfalls and enhance the likelihood of success.In analyzing the recent competition between Team A and Team B, it is evident that Team A's victory was primarily due to their meticulous preparation and strategic execution. Team A's success stemmed from a well-devised game plan that specifically targeted Team B's weaknesses, complemented by flawless execution and rapid adaptability in response to unforeseen tactics from Team B. Their access to advanced resources and effective leadership further bolstered*



## ACTIVITY LOG FOR THE FIRST WEEK

| Day & Date | Brief description of the daily activity | Learning Outcome | Person In-Charge Signature |
|---|---|---|---|
| Day – 1 | Introduction of data analytics | Analysis of the topic | |
| Day - 2 | Introduction of data Analytics | Analysis of the topic | |
| Day – 3 | Agenda and understanding costumeres | clear view of buisness problem and solutions | |
| Day – 4 | Analysis and implementing data | Putting the data in visual form | |
| Day – 5 | data Analytics application | learned about different tools and insights | |
| Day – 6 | Researched the additional information online | additional information about DA. | |

WEEKLY REPORT

WEEK-2 (From Dt. 6/7/24 to Dt. 12/7/24)

**Objective of the Activity Done:** Data transformation and Modeling

**Detailed Report:** The second week focused on data transformation and Modeling within Power BI.

We learned to clean, reshape, and prepare data using power query Editor. The training covered essential functions like filtering, merging and append -ing dataset.

Additionally, we were introduced to data modeling concepts such as relation -ships, cardinality, and data hierarchies.

The practical sessions helped reinforces these concepts by allowing us to create and manage data models effectively.

## ACTIVITY LOG FOR THE FIRST WEEK

| Day & Date | Brief description of the daily activity | Learning Outcome | Person In-Charge Signature |
|---|---|---|---|
| Day – 1 | Introduction of data analytics | Analysis of the topic | |
| Day - 2 | Introduction of data Analytics | Analysis of the topic | |
| Day – 3 | Agenda and understanding coustumers | clear view of buisness problem and solutions | |
| Day – 4 | Analysis and implementing data | Putting the data in visual form | |
| Day – 5 | data Analytics application | learned about different tools and insights | |
| Day – 6 | Researched the additional information online | additional information about DA. | |

WEEKLY REPORT

WEEK – 1 (From Dt 3/1/24 to Dt 5/7/24 )

Objective of the Activity Done: Introduction to Data Analytics and Power BI

Detailed Report: In the first week, we were introduced to the fundamentals of data analytics, Emphasizing the role of data-driven decision making in Modern business. The sessions covered the basics of data analytics, Different types of data, and the importance of data visualization.

We also Explored Power BI, understanding its interface, features, and how it integrates with other Microsoft products.

The week concluded with a hands-on session on loading and transforming data in Power BI.

## ACTIVITY LOG FOR THE SECOND WEEK

| Day & Date | Brief description of the daily activity | Learning Outcome | Person In-Charge Signature |
|---|---|---|---|
| Day – 1 | Data Analytics application | learned about different tools and insights | |
| Day - 2 | Data Analytics application | where it is used in diff sec | |
| Day – 3 | data Analytics process and steps is DA | learned about data Clearing and processing | |
| Day – 4 | data Analytics process and steps is DA | learned about data clearing and processing | |
| Day – 5 | types of data Analytics | different types in DA in clear way | |
| Day – 6 | Revision on given topics | Revised about DA | |

WEEKLY REPORT

WEEK-2 (From Dt. 5/7/24 to Dt. 12/7/24)

**Objective of the Activity Done:** Data transformation and Modeling

**Detailed Report:** The second week focused on data transformation and Modeling within Power BI.

We learned to clean, reshape, and prepare data using power query Editor. The training covered essential functions like filtering, merging and append -ing dataset.

Additionally, we were introduced to data modeling concepts such as relation -ships, cardinality, and data hierarchies.

The practical sessions helped : reinforces these concepts by allowing us to create and manage data models effectively.

## ACTIVITY LOG FOR THE THIRD WEEK

| Day & Date | Brief description of the daily activity | Learning Outcome | Person In-Charge Signature |
|---|---|---|---|
| Day – 1 | buisness problems and the solutions | challanges faced in organisation | |
| Day - 2 | business problemes and the solutiones | challenges faced in organization | |
| Day – 3 | Power BI in Action | visible insights & sales for cost | |
| Day – 4 | BI Architecture | learned about structure | |
| Day – 5 | BI Architecture | learned about structure | |
| Day –6 | Revision on given topics. | Revised about DA | |

WEEKLY REPORT

WEEK-3 (From Dt. 15/7/24 to Dt. 19/7/24)

**Objective of the Actuvity Done:** Data Visualization Techniques

**Detailed Report:** In the third Week, the Emphasis was on data Visualization techniques using power BI.

We Explored various types of charts, graphs, and maps that can be created in power BI to Visualization. data insights.

The sessions included best practices for selecting the right Visualization based on the type of data and the message we want to Convey. we also learned about Customi -zing Visual Elements, using themes, and Enhancing reports with interactive features like slicers and drill-throughs.

## ACTIVITY LOG FOR THE FOURTH WEEK

| Day & Date | Brief description of the daily activity | Learning Outcome | Person In-Charge Signature |
|---|---|---|---|
| Day – 1 | Data to insights flow in Power BI | learned about data and model view | |
| Day - 2 | tables and merges | learned about the kinds in merge | |
| Day – 3 | table and merges | learned about the kinds in merge | |
| Day – 4 | ETL tools in Power query | utilize power BI data flows | |
| Day – 5 | ETL tools in Power query | utilize power BI data flows | |
| Day –6 | Researched the additional information online | additional information about BI | |

WEEKLY REPORT

WEEK-4 (From Dt. 22/7/24 To Dt. 26/7/24)

**Objective of the Activity Done:** Advanced Analytics and DAX

**Detailed Report:** Week four delved into advanced analytics and Data Analytics Expression (DAX) in Power BI.

We learned how to create calculated columns, measures, and custom tables using DAX. The training covered complex DAX functions such as time intelligence filtering, and aggregations.

We also Explored advanced analytical techniques like trend analysis, forecasting, and what-if scenarios.

The week ended with Exercises to build dynamic reports. using DAX-driven insights.

## ACTIVITY LOG FOR THE FIFTH WEEK

| Day & Date | Brief description of the daily activity | Learning Outcome | Person In-Charge Signature |
|---|---|---|---|
| Day – 1 | data sources dash boards and insights | Learned How these are used in BI | |
| Day - 2 | data collection and data cleaning | learned about the process in DA | |
| Day – 3 | data Collection and data cleaning | learned about the process in DA | |
| Day – 4 | data Analytics expressions (DAX) | learned about the expression and functions | |
| Day – 5 | data Analytics expression (DAX) | Learned about the expression and functions | |
| Day –6 | discussion Regarding project | discussed about project. | |

WEEKLY REPORT

WEEK-5 (From Dt. 29/7/24 ..... To Dt. 2/8/24 .....)

**Objective of the Activity Done:** Power BI service and Collabration

**Detailed Report:** The fifth week covered the Power BI service and its Collobrations features.

We learned how to publish reports to the power BI service. share dashboards and collobrate with team members in real time. The sessions Emphasized data security, row-level security. (RLS), and managing workspaces.

We also Explored power BI's integrations with other microsoft skills. tools. like Excel, Teamas, and share point, making it Easier to collobrate and share insights across the Organization.

## ACTIVITY LOG FOR THE SIXTH WEEK

| Day & Date | Brief description of the daily activity | Learning Outcome | Person In-Charge Signature |
|---|---|---|---|
| Day – 1 | filter functions in DAX | different filters in DAX | |
| Day - 2 | filter functions in DAX | different filters in DAX | |
| Day – 3 | Preparations for grand assessment test | preparation for assessment test | |
| Day – 4 | Preparation for grand assessment test | preparation for assessment test | |
| Day – 5 | grand assessment test | gave the grand assessment test | |
| Day – 6 | Researched the additional information online. | additional information about BI | |

WEEKLY REPORT

WEEK-6 (From Dt.....3/6/24..... to Dt.....7/6/24.....)

**Objective of the Activity Done;** Best practice and industry applications

**Detailed Report;** In the final week of internship classes, we focused on best practices in data analytics and real world applications of power BI across various industries.

We discussed key strategies for optimizing data models, enhancing report performance, and maintaining data governance.

The sessions also included case studies showcasing how companies use power BI for Businesses intelligence, Sales analysis, financial reporting, and Operational efficiency, the week wrapped up with an overvoice of the upcoming project work.

WEEKLY REPORT

WEEK-7 (From Dt. 12/8/24 to Dt. 16/8/24)

**Objective of the Activity Done:** Project work data analysis and visualization

**Detailed Report:** The seventh week marked the beginning of the project phase.

We started by defining the project scope, objectives and deliverables.

The project involved analyzing a dataset providing by smart interz. cleaning and transforming the data and building a data models.

Our team focussed on identification key metrices, trends, and patterns that could drive business decisions.

The initial reports and dashboards Were created to visualize these insights, using the skills and techniques learned over the past six weeks.

WEEKLY REPORT

WEEK-8 (From Dt. 19/8/24 to Dt. 23/8/24)

**Objective of the Activity Done:** Finalization and presentation.

**Detailed Report:** In the final week, we completed the project by refining our reports and dashboards, ensuring they met the project requirements.

We focused on enhancing the visual appeal and usability of the dashboards by adding interactive elements and ensuring the data was accurately represented the week culminated with a presentation to the smart interns team, where we showcased our findings, explained the methodologies used, and demonstrated how the insights could be applied to solve data analytics.

The project was well received, marking a successful conclusion to be the intership.

## 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.)*

Description of work environment:

The internship at smart Bridge has been a transformation experience, equipping me with practical skill in data analytics and a deep understanding of Power BI. The hands on experience & exposure to real-world projects has not only sharpened my technical abilities but also improved my communication skills and project management skills. The work environment fastered a collabrative atmosphere with clear task-roles, well-defined protocols & structured procedures. The facilities were equipped with necessary tools for data analysis. Team members exhibited mutual support & team work, contributing to a harmonious relationship. Overall, the internship provided a well-organized comprehensive experience in data analytics and supportive work environment.

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

Description of technical skills acquired

- Data Analysis : Proficiency in examining and interpreting complex datasets.
* Statistical Analysis : understanding and applying statistical method to derive insights.
* Data visualization : Mastery in creating compelling visualization for effective communication of data.
* Programming language : Knowledge & expertise in programming language
* Visualization generation : skills in developing interactive dashboards, comprehensive reports in Power BI.
* Data transformation : Transforming the data using Power Query which involves data cleaning, merging, appending.
* Performance optimization : Improving the performance of reports by optimizing data models, reducing data set size and managing relationships.
* error handling. . Diagnosing and fixing issues related to data refresh query errors and visual inconsistencies.

**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.*

Description of managerial skills acquired:

* Project management: coordinating tasks setting goals & ensuring the timely completion of the data analytics project.
* Team collabration: working efficiency in a group setting, delegating tasks & fostering a collabrative environment.
* Leadership skills: Tasking initiative, guiding the team and making decisions to achieve project objectives.
* Time management: prioritizing tasks, meeting deadlines, & efficiently allocating resources.
* Problem solving as a team: Addressing challenges collectively & finding solutions through group discussions & collbration.
* Adapatability :- Being flexible adoptin to challenges in project slope on ~~requirem~~ requirements.
* Quality Assurance :- ensuring the accuracy & quality of the data analytics project deliverables produced by the team.

**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.,)*

Description of the Communication Skill acquired:

* Technical Communication: effectively Conveying Complex data analytics Concepts & findings.
* presentation Skills: Creating & delivering engaging presentations to Communication insights, dashboard, visualization & Projects.
* Team collabration: collabrating with team members to share information, discuss Project Progress & Update.
* written Communication: Crafting Clear & Concise reports, documentation and emails related to data analytics Processes.
* Conflict resolution: Addressing & Resolving Conflict within the team to maintain a Positive & Productive environment between team member.
* feed back Delivery: Providing Constructive feedback to mentors and trainers and receiving feedBack fostering a culture of of Continuous improvement.

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

Reflecting on my experience in data analytics at Smart bridge internz, I've identified key areas for enhancing my abilities in group discussions, team participation and leadership.

To improve my contributions in group discussions, I aim to actively listen to others, ask insightful questions and share my opinions, perspectives clearly & effectively. As a team leader, I plan to strengthen collaboration by proactively offering support, leveraging my technical skills and embracing different viewpoints of team members. Lastly to enhance my leadership capabilities I plan to focus on tasking initiative creating a positive team environment and effectively coordinating team activities. Through these measure, I am comitted to continuous growth and excellence in my role within the team.

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

Description of digital technologies of power BI:

1) Data connectivity: Power BI connects to a wide array of data sources, including data bases, cloud services and web API's. This technology allows live connection to data sources, enabling real time data analysis without importing data into Power BI.

2) Data transformation and modeling: Power query editor enables users to clean transform and shape also through a user friendly interface PowerBI provides capabilities for creating relationship and different data tables, calculation Column to using DAR.

3) Data visualization: Users can create interactive dashboard with a wide range of visualization such as trailer, graphs, tables. Thus can be customized and tailored to customized and tailored to specify needs.

4) Natural languages processing (NLP): It A feature enables users to ask questions about the data using natural language and power BI will generate visualizations based on the queries. This helps users interface with data in a more initive way.