



## SHORT-TERMINTERNSHIP



**Dr. LANKAPALLI BULLAYYA COLLEGE  
VISAKHAPATNAM**

## Acknowledgements

This power BI presentation on topic "Airline Quality and customer satisfaction" with customer satisfaction and their classes. we acknowledge the Power BI community for their valuable resources, tutorials and forums that aided in our project development. We thank for creating a powerful and intuitive platform for data visualization and analysis. we thank for their expertise in growth & customer satisfaction and airline services. which informed our predictive model. We thank for the providing of data related to ratings are used in this project. we thank our members for their contributions to data analysis and visualizations and insights. We acknowledge organization for providing the resources and support necessary to complete this project. we acknowledge to our reviews in succeeding this power BI presentation. we acknowledge advisors of profs who contributed to this project. Finally, we thank our team members for their hard work and dedication to this project.

## Contents

1. Executive summary
2. Overview of the organization
3. Internship part
4. Activity log for the eight weeks
5. weekly reports
6. outcomes description
7. photos and video links

## 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 making
- 3) Proficiency in power BI tools
- 4) Data cleaning and transformation
- 5) Report design and sharing

### Summary of Internship Activities

- 1) Attending live training sessions and project mentoring sessions
- 2) Selection of topic - "Airline quality and customer satisfaction" and gathering, cleaning and analyzing its related datasets
- 3) Team formation and assignment of tasks to team members.
- 4) Designing developing interactive dashboard, 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 platform's goal is to prepare students for the job market by equipping 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:

- (1) Artificial Intelligence
- (2) Machine Learning
- (3) Internet of Things.

### Organization objective:-

Smart Bridge's main objective is to bridge the existing gaps between prevailing industry standards and what the academics offer to the graduates while passing out of university. We thereby work along the line to offer programs that help the students to gain practical knowledge and hands-on training to learn skills of these fields. Therefore, the main objective of Smart Bridge is providing industry-approved professional electives become a talent factor of India by 2026.

### Chapter 3: Internship part

- Description of the activities/responsibilities undertaken
- 1) Registering me with APSCHE Smart Internship Enrolling for smart bridge's data analytics course i.e., like training sessions as per the pre-scheduled training calendar.
  - 2) participating weekly quiz completing weekly assignment with respect to data analytics.
  - 3) Gathering team formations detection of project topic - "Airline quality and customer satisfaction"
  - 4) Gathering, cleaning, analysing the excel data sets of the project topic - "Airline quality and customer satisfaction".
  - 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 or project video demonstration and preparation of final report.
  - 7) Submission of team project via uploading the project files in Github Repository of the team.

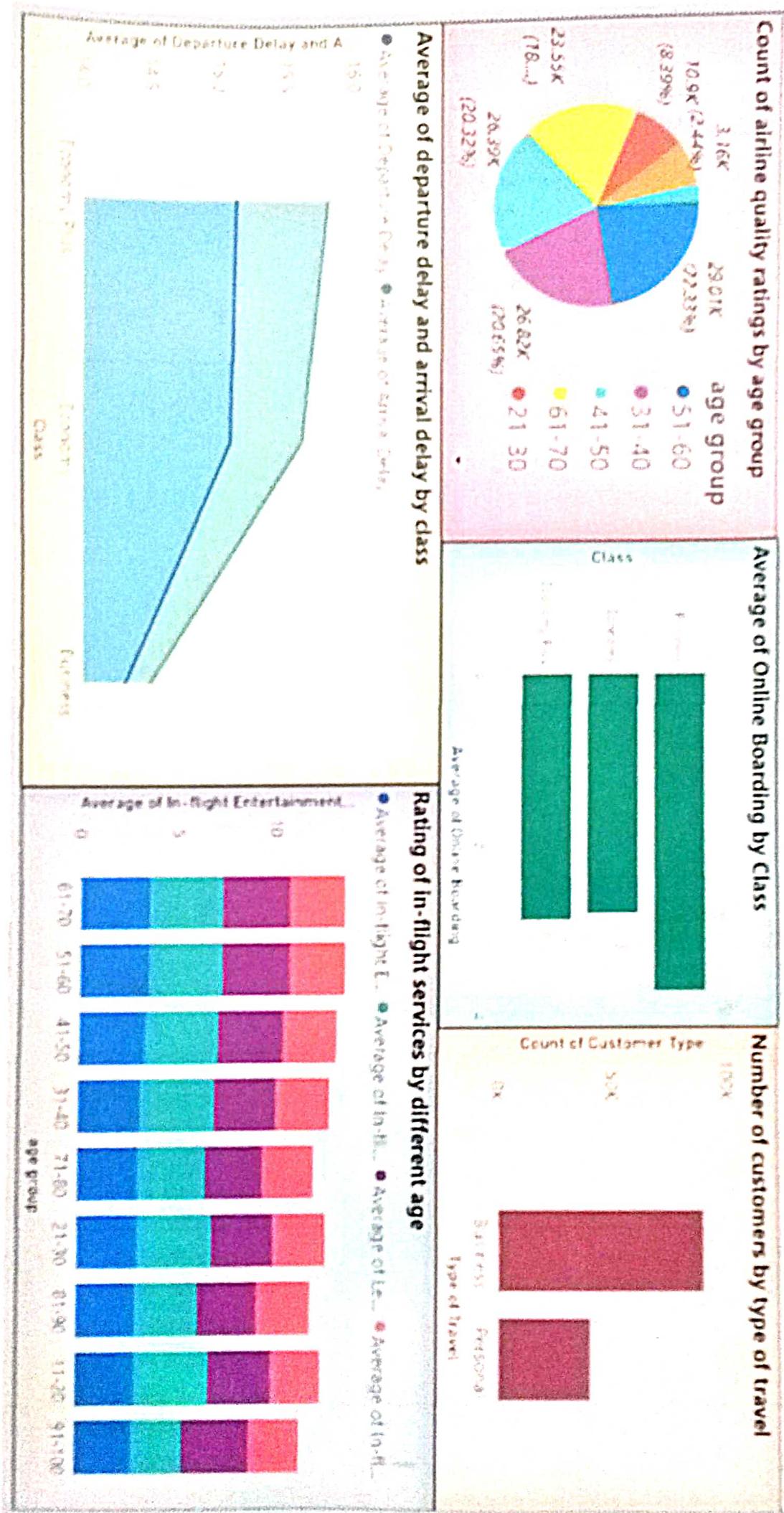
## CHAPTER 4: OUTCOMES DESCRIPTION

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

# Airline Quality and Customer Satisfaction



# Airline Quality and Customer Satisfaction

130K

3.06

3.63

1.19K

Average of Cabin Crew

Average of Departure and Arrival Time Comparison

Average of Baggage Handling

Average of Flight Distance



The flight distance is long for business class as the business class people has to travel long distance and wish to travel in short time.

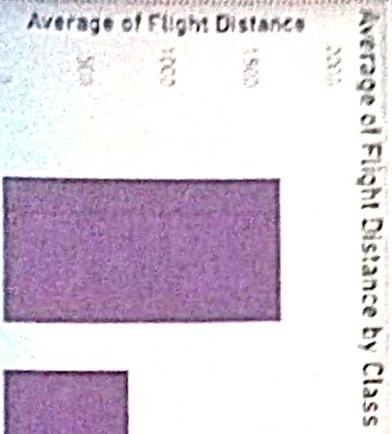
Average of Departure Delay



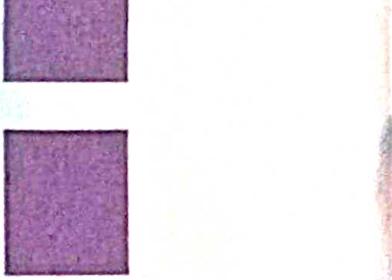
Average of Arrival Delay

● Average of Departure Delay

● Average of Arrival Delay



Average of Flight Distance



Average of In-flight Entertainment

● Average of In-flight Entertainment

- \* Seat comfort & Leg Room aspects have varied feedback with some passengers feelings vary comfortable while others do not .
- \* The majority are satisfied with their flight experience.

### ACTIVITY LOG FOR THE FIRST WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1 3/7/24	Introduction of data analysis and interpreted data visualization	-Analyzing of the topic	
Day - 2 4/7/24	-Agenda for understanding consumer	Clear view of business problem and its solution	
Day - 3 5/7/24	types of analysis process and download of power Bi	Clear analyses on DA-tools and process regarding it	
Day - 4			
Day - 5			
Day - 6			

**WEEKLY REPORT**

WEEK - 1 (From 03/7/24 to 05/7/24.....)

**Objective of the Activity Done:** Introduction to power BI Data analytics

**Detailed Report:** Agenda of data analytics includes,

understanding the fundamentals of power BI and the importance of data analytics in business decision making.

\* attended an orientation session on the internship objectives and deliverables.

- Completed introductory modules on powerBI, including its interface, key features, and capabilities.

- Learned about the various types of data sources that can be connected to powerBI

- Developed a foundational understanding of power BI

- Connected to different data sources and performed basic data cleaning.

- Created a simple report showcasing basic visualizations such as bar charts and line graphs

- participated in a workshop on basic data cleaning and transformation techniques

2<sup>nd</sup>  
ACTIVITY LOG FOR THE FIRST WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1 8/7/24	features and components of powerbi	clear view on every component required	
Day - 2 9/7/24	powerbi in action and its architecture	visible insights and seeks formal	
Day - 3 10/7/24	power query and transformation operations	clarity about ETC tools	
Day - 4 11/7/24	Tools present in power bi desktop	clear view on each and every tool present	
Day - 5 12/7/24	Analysing the data in different types	learned about practically on data usage	
Day - 6			

WEEKLY REPORT  
WEEK-2 (From Dt 8/1/2021 to Dt 12/3/2021)

**Objective of the Activity Done:**

Data importing and modeling

**Detailed Report:**

This week dedicated to mastering data importing and modeling within powerBI. Explored different data connectors available in powerBI, such as, excel, SQL, database, and online services.

Learning about the ETL (Extract, transform, load) process within powerBI.

practiced data modeling techniques, including creating relationships between tables, using DAX (Data analysis expressions) functions, and designing calculated columns.

successfully imported datasets from multiple sources into powerBI

Built a robust data model with well-defined relationships.

used DAX to create calculated columns and measures for enhanced analysis.

**ACTIVITY LOG FOR THE FIRST WEEK**

3<sup>rd</sup>

<b>Day &amp; Date</b>	<b>Brief description of the daily activity</b>	<b>Learning Outcome</b>	<b>Person In-Charge Signature</b>
Day - 1 15/7/24	data collection and data cleaning	Learned about the process of DA	
Day - 2 16/7/24	Differentiated between storyboard, dashboard and report	Learned the different about contents to represent	
Day - 3 18/7/24	Data structuring and its usage with power bi	Learned the usage of data structure.	
Day - 4 19/7/24	Revised on topics as far completed	Clear view with the usage of power bi	
Day - 5			
Day - 6			

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

**Objective of the Activity Done:**

**Detailed Report:** Data visualization techniques

This week focused on creating

Effective and interactive data visualizations in power BI

- Studied various visualizations options available in power BI including advanced charts, maps, and custom visuals.
- Participated in a hands-on session to design interactive dashboards with slicers, filters, and drill-throughs.
- Learned best practices for choosing appropriate visualizations for different data types and insights.
- Designed a comprehensive dashboard featuring key metrics using a mix of visuals.
- Implemented interactivity through slicers and filters to allow users to explore the data dynamically.
- Presented the dashboard to peers for feedback.

**ACTIVITY LOG FOR THE FIRST WEEK**

4<sup>th</sup>

<b>Day &amp; Date</b>	<b>Brief description of the daily activity</b>	<b>Learning Outcome</b>	<b>Person In- Charge Signature</b>
Day - 1 22/7/24	Research the additional information	-Additional information about power bi	
Day - 2 23/7/24	Revised about data collection and data cleaning	Learned about in DA	
Day - 3 24/7/24	Revised about the data visualization	Clear view on visualization part	
Day - 4 25/7/24	DAX and DAX functions	Clear view on DAX functions	
Day - 5 26/7/24	All the functions present in power bi	Learned about the functions to apply	
Day - 6			

WEEKLY REPORT  
WEEK-4 (From Dt. 22.7.24..... To Dt. 26.7.24.....)

**Objective of the Activity Done:**

**Detailed Report:**

Advanced data analysis with DAX

This week was dedicated to deepening our understanding of DAX for advanced data analysis.

- Completed advanced DAX Training modules covering topics such as time intelligence, advanced filtering, and context management.
- Worked on a case study that required creating complex measures to calculate year-over-year growth and rolling averages.
- Collaborated with peers to troubleshoot DAX-related issues in our data models.
- Developed proficiency in writing complex DAX Expressions.
- Applied time intelligence functions to analyze trends over time.
- Improved the accuracy and efficiency of data models using advanced DAX.

**ACTIVITY LOG FOR THE FIRST WEEK**

5<sup>th</sup>

<b>Day &amp; Date</b>	<b>Brief description of the daily activity</b>	<b>Learning Outcome</b>	<b>Person In-Charge Signature</b>
Day - 1 29/7/24	Explained more about <u>functions</u> in DAX	Learned about Expressions and function in DAX	
Day - 2 30/7/24	more about filters <u>functions</u> in DAX	Clear view on different views	
Day - 3 31/7/24	preparation for grand assessment	prepared for test	
Day - 4 1/8/24	preparation for grand assessment	prepared for test	
Day - 5 2/8/24	grand assessment test	grand the test	
Day - 6			

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

**Objective of the Activity Done:**

**Detailed Report:**

Real-world case study : sales analytics  
This week focused on applying power BI skills to a real-world sales analytics case study.

- Received a dataset representing sales data from a fictional company.
- Defined key performance indicators (KPIs) such as sales growth, customer acquisition, and product performance.
- Built a sales dashboard to visualize the KPIs and identify trends, outliers, and areas for improvement.
- Created a comprehensive sales dashboard that highlighted crucial business insights.
- used data storytelling techniques to communicate findings effectively.
- Received positive feedback from mentor on the practical application of power BI skills.

ACTIVITY LOG FOR THE FIRST WEEK  
6<sup>th</sup>

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1 5/8/24	optimising power bi report	clear view on optimising	
Day - 2 6/8/24	Implementation of incremental data	Learned about PA with huge dataset	
Day - 3 7/8/24	Application in business scales	Clear view on real-time application	
Day - 4 8/8/24	Application of techniques to size data models	Learned about sizing data models.	
Day - 5 9/8/24	Learned about user information with reports	Clear view on report based data	
Day - 6			

**WEEKLY REPORT**  
WEEK-6 (From Dt. 5/8/24 to Dt. 9/8/24)

**Objective of the Activity Done:**

**Detailed Report:**

Report optimization and tuning  
This week focused on optimizing power BI reports for performance and scalability.

- Learned about power BI report optimization techniques, including data reduction, efficient use of DAX, and query optimization.
- Implemented incremental data refresh to improve report load times.
- Explored best practices for managing large datasets and reducing memory usage.
- Optimized existing reports to load faster and handle larger datasets.
- Applied techniques to reduce the size of data models without losing critical information.

**ACTIVITY LOG FOR THE FIRST WEEK**

7<sup>th</sup>

<b>Day &amp; Date</b>	<b>Brief description of the daily activity</b>	<b>Learning Outcome</b>	<b>Person In-Charge Signature</b>
Day - 1 12/8/24	Formation of team	Clear view on team	
Day - 2 13/8/24	project scope and objectives	clear view on project assigned	
Day - 3 14/8/24	Aggregation &- public reports	Segregation &- data analysis	
Day - 4 15/8/24	Configured public refreshes	Retrieved info on dataset	
Day - 5 16/8/24	Feedback on accessibility with publisher report	Clear view on outcome of reports	
Day - 6			

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

Objective of the Activity Done:	Data analysis and project work - visualization
Detailed Report:	<p>This week marked the beginning of the project phase.</p> <ul style="list-style-type: none"><li>• Started by defining the project scope, objectives and deliverables.</li><li>• The project involved analyzing a dataset provided by Smart Billing, cleaning and transforming the data, and building a data model.</li><li>• Our team focused on identifying key metrics, trends and patterns that could drive business decisions.</li><li>• The initial reports and dashboards were created to visualize these insights, using the skills and techniques learned over the past six weeks.</li></ul>

**ACTIVITY LOG FOR THE FIRST WEEK**

8<sup>th</sup>

<b>Day &amp; Date</b>	<b>Brief description of the daily activity</b>	<b>Learning Outcome</b>	<b>Person In-Charge Signature</b>
Day - 1 19/8/24	presenting actionable insights	clear view on Pictorial representation	
Day - 2 20/8/24	presenting the dashboard and reports	Representing the final output	
Day - 3 21/8/24	Collaborations file uploading	Sharing worth to all members in team	
Day - 4 22/8/24	Reviewing on dashboard, report	clear view on work done in DA	
Day - 5 23/8/24	Submission of project	Submitted to mentor	
Day - 6			

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

**Objective of the Activity Done:** project work - finalization and presentation

**Detailed Report:**

In this 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 Interning Team, where we showcased our findings, explained the methodologies used, and demonstrated how the insights could be applied to solve real business problems.
- The project was well received, marking a successful conclusion to the internship.

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

Description of the technical skills acquired :-

Data analysis :- proficiency in examining and interpreting complex data set.

Statistical analysis :- understanding and applying statistical methods to derive insights.

Data visualization :- mastery in creating compelling visualization for effective communication of data.

Analytics and tools proficiency :- proficiency with web based tools like ms excel, power bi, google colab for analytics and visualization.

Programming language :- knowledge and expertise in python programming language.

Visualization generation :- skills in developing interactive dashboards, comprehensive reports, narrative stories.

problem solving :- Developing solutions to challenges encountered during data analysis.

Data cleaning and pre processing :- proficiency in data cleaning and preparing data for analysis.

**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 the managerial skills acquired:-**

project management:- coordinating tasks, setting goals and ensuring the timely completion of the data analytics

Team collaboration:- working effectively in a group setting delegating tasks, and fostering a collaborative environment.

Leadership skills:- taking initiative, guiding the team, and making decisions to achieve project objectives.

Time management:- prioritizing tasks, meeting deadlines, and efficiently allocating resources.

problem solving as a team:- addressing challenges collectively and finding solutions through group discussions and collaboration.

Adaptability:- being flexible and adapting to changes in project scope or environment.

Quality Assurance:- ensuring the accuracy and quality of the data analytics project deliverables produced by the team.

→ Feedback and Improvement: - providing constructive feedback to team members and actively participating in customs improvement processes.

**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 skills acquired:-

Technical communication:- Effectively conveying complex data analytics concepts and findings.

Presentation skills:- creating and delivering engaging presentations to communicate insights, dashboard, visualizations and projects.

Team collaboration:- collaborating with team members to shape information, discuss project process and updates.

Written communication:- crafting clear and concise reports, documentation and emails related to data analytics process.

Conflict Resolution:- Addressing and resolving conflicts within the team to maintain a positive and productive environment between team members.

Feedback delivery:- providing constructive feedback to peers, fostering a culture of continuous improvement

Clarity in instructions:- clearly communicating project tasks, goals and expectations, notes to

every team member.

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 Infra, I've identified key areas for enhancing my abilities in group discussions, team participation and leadership.

To improve my contributions in group discussions, I am to actively listen to others, ask insightful questions and shape my opinions, perspective clearly and effectively. As a team member, I plan to strengthen collaboration by proactively offering support, like aging my technical skills, and embracing different viewpoints of team members, lastly to enhance my leadership capabilities, I plan to focus on taking initiative, creating a positive team environment, and effectively coordinating team activities. Through these measures, I'm committed 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 the digital technologies:-

power BI :- power bi (Business Intelligence) tool is used for managing and analyzing data. It integrates reporting, modeling analyses, dashboards, stories and event management to efficiently organize data for effective decision making.

python :- python is a high-level, interpreted, interactive and object-oriented scripting language. It is used for server-side web development, software development, and system scripting, task automation, data analysis and data visualization.

visual studio code :- visual studio code aka vs code is a source code editor software developed by micro soft for windows, and macos. It is used for program code editing like debugging ,task running and version control, code refactoring.