



## SHORT-TERMINTERNSHIP



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## Acknowledgements

This powerbi presentation on topic "BLACK FRIDAY SALES" with product ID's, user ID's, purchases and etc. data was made possible through the contributions of several individuals and organizations. 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 purchases and sales growth, which informed our predictive model. We thank for the providing of data related to sales used in the project. We thank our team 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 review in succeeding this power bi presentation. We acknowledge advisors or peers who contributed to this project. Finally, we thank our team members for their hard work and dedication to this project.

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## CHAPTER 1: EXECUTIVE SUMMARY

The internship report shall have only a one-page 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.

Description of the sector of business and intern Organization:-

Smartbridge operates in the data analytics sector, providing innovative solutions to enhance the business intelligence. The organization uses various Power BI logos Analytics to empower clients with actionable insights, enabling data-driven decision-making.

Learning Objectives and Outcomes:-

- Data Cleaning
- Data Preprocessing and manipulation
- Statistical analysis

Summary of Internship Activities:-

- Attending live training sessions and Project-Mentoring sessions.
- Selection of topic - "Student Performance Analysis" and gathering, cleaning and Analyzing its related data sets in Excel.
- Team Formation and Assignment of tasks to team members.
- Designing and Developing interactive Dashboard, Report on project by using Power BI.
- Drafting Project video demonstration and preparation of Final Report.

## CHAPTER 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.

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 establishing a cooperative relationship between industry and Academia. 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,

- Artificial Intelligence
- Machine Learning
- Internet of things.

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## 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 which passing out of university. Smart Bridge offers suitable skill development and 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 training to learn skills of the future. Therefore, the main objectives of Smart Bridge is providing Internship for every student, Promote Industry Approved Professional Electives, and becomes a talent factory of India by 2026.

## CHAPTER 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.

Description of the Activities / Responsibilities Undertaken :-

- Registering with APSCHB smartintern and enrolling for Smartbridge's Data analytics course i.e., live training Sessions as per the Pre-scheduled training calender.
- Participating weekly quiz and completing weekly assignments with respect to data analytics
- Team Formation and selection of project topic "BLACK FRIDAY SALES."
- Gathering, cleaning and analyzing the Excel data sets of the Project Topic - "BLACK FRIDAY SALES"
- Attending Project -Mentoring sessions and designing and developing interactive Dashboard, story, Report on the project topic using BLACK FRIDAY SALES.
- Web integration of above project deliverables with team's web page using visual studio code, drafting a project video demonstration and preparation of Final Report
- Submission of team project via uploading the project files in Github Respository 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 :-

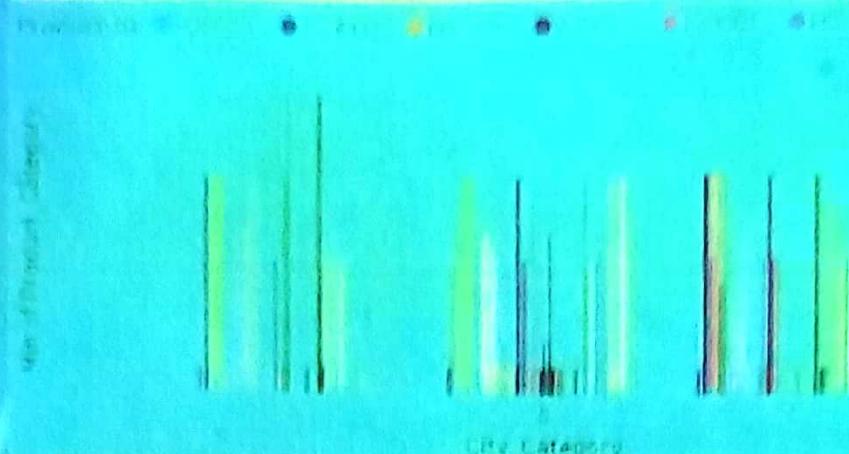
The internship at smartBridge has been a transformation experience, equipping me with practical skills in Data-Analytics and a deep understanding of the role of power BI in the industry. The hands-on experience and exposure to real-world projects has not only sharpened my technical abilities but has 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 teamwork, contributing to a harmonious relationship. Overall, the internship provided a comprehensive experience in data Analytics within a well-organized and supportive work environment.

# BLACK FRIDAY SALES

Max of Purchase by Age in black friday sales



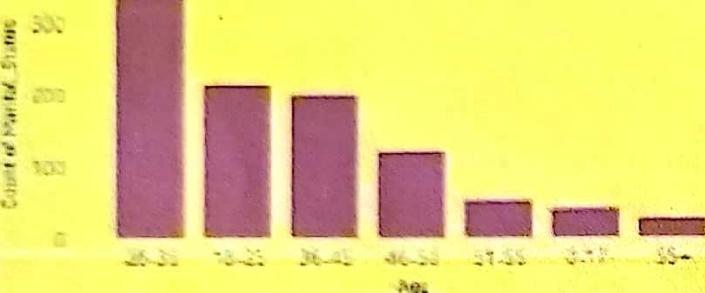
minimum Product\_Category\_1 by City\_Category and Product\_ID in black friday sales



Average of Purchase by City\_Category in black friday sales



Count of Marital\_Status by Age in black friday sales



Average of Occupation by Product ID in black friday sales



# BLACK FRIDAY SALES

24K

Max of Purchase

2144

Sum of Stay\_In\_Current\_City\_Years

Sum of Stay\_In\_Current\_City\_Years and Sum of Marital\_Status by City\_Category



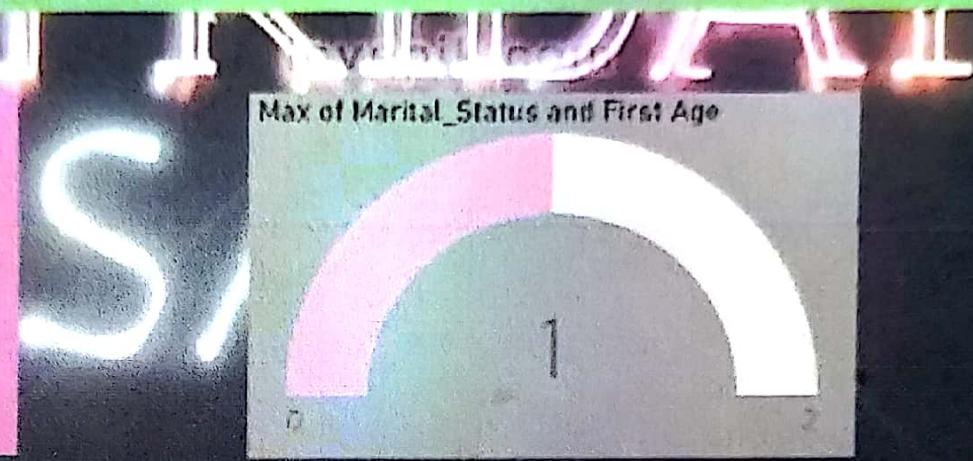
B represents the stay in current city years 263  
c represents the city categories 825  
A represents the city category 337

**Black Friday Sales are great way amazing deals on a wide range of products.**

**PRODUCTS:** Products play a crucial role in black friday sales,as they are core offerings that drive customer purchasing decisions.

**DISCOUNTS AND DEALS:** Discounts on popular products attract customers,driving sales and revenue.

**PRICE COMPARISON:**Enabling customers to compare products and retailers can build trust and increase sales.



max marital status and first age 0-17 of black friday sales

949

Count of Purchase

18

Max of Product\_Catagory\_3

Sum of Marital\_Status and Count of Gender by Age



sum of marital and gender by age of black friday sales



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## ACTIVITY LOG FOR THE FIRST WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1 03/07/24	Introduction of data analysis and interpreted data visualization	Analysis of the topic	
Day - 2 04/07/24	Agenda and understanding consumes	clearview of business problem and its solution	
Day - 3 05/07/24	Types of analysis process and download of power BI	clear analysis on DA tools and process regarding it.	
Day - 4			
Day - 5			
Day - 6			

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WEEKLY REPORT

WEEK - 1 (From Dt. 3/4/24 to Dt. 5/7/24...)

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 Power BI including its interface, key features, and capabilities
- Learned about the various types of data sources that can be connected to power BI
- Developed a fundamental, 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.

## ACTIVITY LOG FOR THE SECOND WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1 08/07/24	Features and components of power BI	clear view on every component required	
Day - 2 09/07/24	Power BI in action and its architecture	visible insights and sales format	
Day - 3 10/07/24	Power query and transformation operations	clarity about ETC tools	
Day - 4 11/07/24	Tools present in power BI Desktop	clear view on each and every tool present	
Day - 5 12/07/24	Analysing the data in different types	Learned about practicality on data usage	
Day - 6			

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**Objective of the Activity Done:**

Data importing and modeling

**Detailed Report:**

This week focused on data transformation and modeling within power BI

- Explained different data connectors available in power BI, such as Excel, SQL databases and online services
- we learned how to clean, reshape, and prepare data using power query editor.
- The training covered essential functions like filtering, merging and appending datasets.
- practiced data modeling concepts such as relationships between tables, cardinality and data hierarchies.
- Successfully imported datasets from multiple sources into power BI, then learning about the ETL (extract, Transform, Load) process within power BI and practiced data modeling techniques.
- The practical sessions helped reinforce 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 15/07/24	Data collection and data cleaning	Learned about the process of in DA	
Day - 2 16/07/24	Differentiated between storyboard, Dashboard and report	Learned the difference about between contents to represent	
Day - 3 18/07/24	Data structuring and its usage with power BI	Learned the usage of data structure	
Day - 4 19/07/24	Revised on Topics as far completed	clear view with the usage of power BI	
Day - 5			
Day - 6			

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Objective of the Activity Done:

Data Visualization Techniques

Detailed Report:

This week focused on creating effective and interactive data visualizations in power BI.

- Studied various visualizations options available in power BI, including various types of charts, graphs, and maps.
- Explored various types of charts, graphs and maps that can be created in power BI to visualize data insights.
- Participated in a hands-on session to design interactive dashboards with slicers, filters and drill-throughs.
- The sessions included best practices for selecting the right visualizations based on the type of data and the message we want to convey.
- Designed a comprehensive dashboard featuring key metrics using a mix of visuals.
- Also learned about customizing visual elements, using themes and enhancing reports with interactive features.

## ACTIVITY LOG FOR THE FORTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1 22/07/24	Research the additional information	Additional information about power BI	
Day - 2 23/07/24	Revised about data collection and data cleaning	Learned about starting process in DA	
Day - 3 24/07/24	Revised about the data visualisation	clear view on visualisation part	
Day - 4 25/07/24	DAX and DAX functions	clear view on DAX functions	
Day - 5 26/07/24	All the functions present in power BI	Learned about the functions to apply	
Day - 6			

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

**Objective of the Activity Done:**

Advanced Data Analysis with DAX

**Detailed Report:**

This week delved into advanced analytics and Data Analysis expressions (DAX) in power BI.

- DAX is a formula expression language used in analysis services.

- DAX is also functional language where full code is kept inside a function.

- Learned how to create calculated columns, measures, and custom tables using DAX.

- The training covered complex DAX functions such as Aggregate functions, Text function, Date function, logical functions, Time intelligence, filtering, counting functions and Information functions.

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

- explored advanced analytical techniques like trend analysis, forecasting and what if scenarios.

- Improved the accuracy and efficiency of data models using advanced DAX

- 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 29/07/24	Explained more factors in DAX	learned about expressions and functions in DAX	
Day - 2 30/07/24	More about filters functions in DAX	clearview on different views	
Day - 3 31/07/24	Preparation for grand assessment	Prepared for test	
Day - 4 01/08/24	Preparation for grand assessment	Prepared for test	
Day - 5 02/08/24	Grand assessment test	grand gave the assessment	
Day - 6			

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WEEKLY REPORT  
WEEK-5 (From Dt....29.17.24... To Dt....2.18.24.....)

**Objective of the Activity Done:**

Real world Case Study : Sales Analytics

**Detailed Report:**

This week focus 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 (KPI's) such as sales growth, customer acquisition, and product performance.
- Built a sales dashboard to visualize the KPI's 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 mentors on the practical application of power BI skills.

## ACTIVITY LOG FOR THE SIXTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1 05/08/24	Optimising power BI Report	clear view on optimising	
Day - 2 06/08/24	Implementation of Incremental data	Learned about DA with huge dataset	
Day - 3 07/08/24	Application in business scales	clear view on equal-time applications	
Day - 4 08/08/24	Application of techniques to size data models	Learned about sizing data models	
Day - 5 09/08/24	Learned about users information with reports	clear view on report based data.	
Day - 6			

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

**Objective of the Activity Done:**

Power BI Service and collaboration

**Detailed Report:**

This week covered the Power BI service and its collaboration features.

- Learned how to publish reports to the Power BI service, share dashboards and collaborate with team members in real time.
- The sessions emphasized data security, row-level security (RLS), and managing workspaces.
- Also explored Power BI's integration with other Microsoft tools like Excel, Teams and SharePoint, making it easier to collaborate and share insights across the organization.
- This week wrapped up with an overview of the upcoming project work.

**SEVENTH**  
**ACTIVITY LOG FOR THE FIRST WEEK**

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1 12/08/24	Formation of Team	clear view on team	
Day - 2 13/08/24	Project scope and objectives	clear view on project assigned	
Day - 3 14/08/24	Aggregation of public reports	Segregation of data analysis	
Day - 4 15/08/24	Configured public refreshers	Reviewed self on dataset	
Day - 5 16/08/24	Feedback on accessibility with published 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:** Project work - Data Analysis and visualization

**Detailed Report:**

This week marked the beginning of the project phase.

- Started by defining the project scope, objectives and deliverables.
- The project involved analyzing a dataset provided by Smart Internz, cleaning and transforming the data, and building a data model.
- Our team focused on identifying key metrics, 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.

**EIGHTH**  
**ACTIVITY LOG FOR THE FIRST WEEK**

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1 19/08/24	Presenting actionable insights	clear view on pictorial representation	
Day - 2 20/08/24	Presenting the dashboards and reports.	Representing the final output	
Day - 3 21/08/24	collaborations, file uploading	Allocating work to all members in team	
Day - 4 22/08/24	Reviewing on dashboard, report	clear view on work done in DA	
Day - 5 23/08/24	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 Internz 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 dataset.
- Statistical Analysis:- Understanding and applying statistical methods to derive insights.
- Data Visualization :- Mastery in creating compelling visualization for effective communication of data.
- Analytics 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 preprocessing:- 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 requirements.
- 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 continuous 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 share information, discuss project progress and updates.
- Written communication:- Crafting clear and concise reports, documentation and emails related to data analytics processes.
- 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, mentor and trainers and receiving feedback, .. Fostering a culture of continuous improvement.
- Clarity in instructions:- Clearly communicating project tasks, goals, and expectations, roles 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 smartbridge interns, 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 and effectively. As a team member, 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 taking initiative, creating a positive team environment, and effectively coordinating team activities through these measures, I am 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 analysis, 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 microsoft for windows, and Macos. It is used for program code editing like debugging ,task running and version control ,code Refactoring.
- Get Bootstrap:- Get Bootstrap is a free, open source front-end development framework for the creation of websites and web applications. It also enables designers and developers for mobile- first applications.