SHORT-TERMINTERNSHIP

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Acknowledgements

I would sincerely like to thank APSHE for providing me with this short-term Immession internship which helped me gain practical experience and knowledge on data analytics.

I thank your respected principal sir Dr. G.S.K chakravarthy for giving me this wonderful opportunity.

I would also like to thank our Head of the Department for being a wonderful mentor throughout my project.

I thank Almighty (god, my parents and my friends without whose help this project would not have bee completed.

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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

This report presents a summary of my internship experience focused on improving retail success and driving sales within the retail sector.

The global of this internship was to gain practical insights into retail operations, customer engagement strategies, and sales optimization techniques. understanding retail operations helps to develeop a comprehensive understanding of retail operations and sales process. It Gained hand-on experience in managing store layout, inventory control and daily sales, operations, ensuring a seamless customer experience. During the Internship period, I was Involved in a wide range of activities that contributed to the overall success of the retail operations.

- Analyzed sales data to Identify trends and helped create reports that informed decision making process and team collaboration.
- offering practical experience in driving sales.

Chapter-2 overview of the organization

Smart Bridge is a platform that allows virtual internship to the students. The platform goal is to prepare students. the job market by establishing a cooperative relationship between industry Acade-mic. Smart bridge parteners with companies such as google to offer virtual internships. The Provide students with hands on experience with the latest technologies and enable project based learning Smart bridge flaging event is the "SUMMER internship program". the program develops students skills in internship.

Emerging technologies i.e

1) Artificial Intelligence
2) machine learning
3) Internet of things

organizations objectives

Smart Bridges main objective is to bridge the existing gaps between prevailing industry standards, and what passing out of university Smart Bridge offers suitable skill development and techniques to the young talent before on boarding first job.

Their skill development progress are designed considering the present in demand skills in the industry. we theory work along the line to offers best programs that helps the students to gain practial knowledge and hand on training to learn skills of these future.

Therefore the main objective of Smart bridge is providing internship for every students promote industry approved proffesional effectives become a talent factors of India by 2025.

CHAPTER - 3

INTERNSHIP PART

Description of the activities/ responsibilities under taken:

1) Registering with APSCHE smartinternship enrolling for the statement smart bridge's data analytics course i.e. live training sessions as per the pre-sheduled training calendar.

2) Participating weekly quiz completing weekly assignment with respect to data analytics.

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

4) Attending project - Mentoring sessions and designing and developing interactive dashboard report on the project topic using power BI.

5) Web Integration of above project delivarbles with teams web page using visual studio code, Drafting a project video demonstration & prepare report.

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 visuali-zation	Analysis of the topic	
Day - 2 4/7/24	Agenda and underst-anding consumers	clear view of business problem and its solution	
Day – 3 5/7/24	Types of analytics process and downloa-d of power BI	clear analysis on DA tools and process regarding it	
Day – 4			
Day – 5			
Day –6			

WEEKLY REPORT

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

Objective of the Activity Done: Introduction to power BI and data Analytics

Detailed Report: → Data Analytics is the practice of utilization data, statistical methods and technology to extract meaningful insight and make decision accordingly.

→ To creat about Data collection, Data cleaning, Data analysis, Data visulization, Interprectation, and bussiness analytics.

→ Power BI visualizes the graph dashboards and piecharts. It facilitates reports etc. Explain about features of power BI.

→ The explaination of bar chart, columnchart and scatterplot.

Agenda: → Introduction to data analytics and business Intelligence.

→ Business problem and solution

→ power BI in action

→ Introduction to power BI

→ Data to insight flow in power BI.

→ Power BI Architecture.

→ Power BI components like Data view, power views power queries, desktop, power BI services etc.

ACTIVITY LOG FOR THE SECOND WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In - Charge Signature
Day – 1 8/7/24	Features and componets of power BI	clear view on Every component required	
Day - 2 9/7/24	power BI in action and its architecture	visible insights and sales. format	
Day – 3 10/7/24	power query and transformation operations	clearity 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	Analying the data in different types	Learned about practicality on data usage.	
Day –6			

WEEKLY REPORT

WEEK-2 (From Dt. 8/7/24 to Dt. 12/7/24)

Objective of the Activity Done: Data Importing and modeling.

Detailed Report: →

Data modelling is the creating relationship between tables by using the primary key.

→ Explored different data connectors available in power BI, such as Excel, SQL databases and online services

→ We learned how to clean, reshape and prepare data by using power query editor.

→ The training covered essential functions like filtering, merging and appending data sets.

→ Additionally we were introduced to data modelling concepts such as relationships, cardinality and data hierarchies.

→ practiced data modeling techniques, including creating relationship between tables using DAX (Data Analysis expression) function, and designing the data and calculated the columns and rows data.

→ We learned about ETL (Extract, transform, load) process within the power BI.

→ We learned the dimensional and measures, Dimensional - categorical, string characters measures and numerical values.

ACTIVITY LOG FOR THE THIRD WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In - Charge Signature
Day – 1 15/7/24	Data collection and data cleaning	learned about the process in DA.	
Day - 2 16/7/24	Differentiation between storyboard Dashboard and report	learned the differenced 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 for 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 Actuvity Done: Data visualization using power BI

Detailed Report: -> learned about the data visualization options available in power BI.

-> They including all the maps, charts, advanced charts and custom visuals.

-> The tools present in power BI desktop are Remove columns, Reduce rows, Sorting, split columns, graph by, Data types, Refresh preview, Replace value, transpose, Reverse rows, count rows, Select the data type, Rename, fill, move, format and Rename etc.

-> In these third week, the emphasis was on data visualization techniques using power BI.

-> we explored the various different types of chart to created in power BI. To visualize datainsights. we learned about customizing visual elements. the sessions included in the best practices for selecting the right visualizations based on the type of data.

-> There are two ways for analyze the data.

1) visualization.

2) Statistically

-> visualization means that graphical representations of the data.

ACTIVITY LOG FOR THE FOURTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In - Charge Signature
Day – 1 22/7/24	Researched the additional inform - ation.	additional info about power BI	
Day - 2 23/7/24	Revised about data collection and data cleaning	Learned about starting process in DA	
Day – 3 24/7/24	Revised about the data visualisa - tion.	clear view on visualisation part.	
Day – 4 25/7/24	DAX and DAX function	clear view on DAX function	
Day – 5 26/7/24	All the function present in power BI	Learned about the function to apply	
Day –6			

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 we was dedicated to deepening on our understanding of DAX for advanced data analysis.

-> DAX course is a training program to help individual improve the skills in using this DAX.

-> DAX for advanced data modeling, analysis and visualization.

-> DAX (Data Analytics Expression)

-> the formula Expression language used in analysis services of power BI Excel.

-> we learned how to create calculated columns, measure, and custom table using DAX

-> worked on a cases 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.

-> Applied time Intelligence function to analyze trends over time.

-> DAX function was text function, Date function logical function, counting function and Information function.

ACTIVITY LOG FOR THE FIFTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In - Charge Signature
Day – 1 29/7/24	Explained more factors in DAX	learned about Expression and functions in DAX	
Day - 2 30/7/24	more about filter function in DAX	clear view on different views	
Day – 3 31/7/24	prepartion 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 assessment.	
Day –6			

WEEKLY REPORT

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

Objective of the Activity Done:

Functions and power BI service

Detailed Report:

The functions of power BI includes All, ALL NO BLANK ROW, calculate, Filter, match by, order by and calculate table.

-> Power BI is a collection of software services, apps and connectors that work together to help you create, share, and consume business insight in the way that serves you and your business most effectively.

-> 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

-> we also explored power BI integration with other microsoft tools like excel, teams, and share points, making it easier to collobrate.

-> created a comprehensive sales dashboard that highlighted crucial business insight.

-> Received positive feedback from mentors on the practical application of power BI skills

-> Finally the focus of this week was on applying power BI skills to a real world sales analytics

ACTIVITY LOG FOR THE SIXTH WEEK

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 optimisation	
Day - 2 6/8/24	Implementation of incremental data	learned about DA with huge data set.	
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 sizeing 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: project completion and Report optimizat-ion

Detailed Report: ->

In this week focused on project completion and Report optimization on power BI. reports for performance and scalability.

-> Explored best practices for manging large data sets and reducing memory usage.

-> we included the use of power BI for Business Intelligence, sales analysis, financial reposting and operational efficiency.

-> we applied techniques to reduce the size of the data models without losing critical information

-> It's Improved that overall performance and user Experience of power BI reports.

-> we learned about power BI reports optimizat-ion techniques, included data reduction, Efficint use of DAX and query optimization.

-> In the final week of intership classes, we focused on best practices in the data analytics and real-world application key strategies for optimizing data models, enhancing report performance and maintaining data governance.

ACTIVITY LOG FOR THE SEVENTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In - Charge Signature
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 of public reports	Seggregation of data analysis	
Day - 4 15/8/24	configured public refreshes	Reviewed self on dataset	
Day - 5 16/8/24	feedback on accessibility with published reports	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: Assignment & Project work.

Detailed Report:

Data Analysis and visualization.

-> the seventh week was dedicated to learning how to publish and share power BI reports with stakeholders.

-> the Explored different powerBI series option, and including workspaces, sharing and security setting

-> the project involved analyzing a dataset provided by smart Interns, cleaning and transforming the data, building a data model.

-> published reports to the power BI services and configured scheduled refreshes.

-> the initial report and dashboard were created to visualize these insights, using the skills and techniques.

-> successfully published report power BI and shared them with the internship team.

-> configured role-based security to control access to sensitive data.

-> received feeback on the accessibility and usability of the published reports.

ACTIVITY LOG FOR THE EIGHT WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In - Charge Signature
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	Alloting work 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: Finalization of project work

Detailed Report: Finalization and presentation.

-> In the final week, we completed the project by refining our reports and dashboard.

-> we focused on completing a capsture project and presenting it to the intership supervisors.

-> worked on a final project that involved analyzing a complex data set and presenting actionable insights to a mock client.

-> we use methodologies and demonstrated how the insights could be applied to solve real business problem.

-> Developed a comprehensive power BI report that included data exploration, advanced visual-izations and key recommendations.

-> successfully completed the capstone project, demonstrating a strong understanding of data analytics using power BI

-> concluded the intership on the quality of appreciation for data analytics and power BI as a business intelligence tool.

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 of Smart Bridge has been a transformative experience, equipping me with practical skills in Data - analytics and a deep understand of the role of IBM cognos Data analytics in the industry. the hanaron experience & axpouser to real world projects has not only sharpened my technical abilities but also honed my communication skills and Project managment skills. The work environment fortered a collaborative atmosphere with clear task- roles, we defined protocols & structured procedure. The facilities were equipped with necessary tools for data analyis. team numbers exhibited mutual support and teamwork, contributing to a harmonious relationship overall, the internship provided a comprehensive experience in the data analytics.

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 the complex data sets.
* statistical analysis: understanding and applying statistical methods the derive insights
* Data visualization: mastery is creating compelling visualizations for effective communication or data
* Analytics tools proficiency: proficiency with web based tools skill ms. excel, power BI, Google colab for analytic visualization,
* programming language: knowledge & expertise in python programming language.
* visualization Generation: skills is developing interactive Dashboards, comprehensive, reports narrative stories in lognes analytics.
* problem solving: Developing solutions in challenges encounted during data analysis.
* Data cleaning and preprocessing: proficiency in data cleaning & preparing the 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 communication skills acquired

* technical communication : effectively conveying complex data analytic concepts & findings.
* presentation skills : creating & delivering engaging presentations to communicate insights, dashboard visualization & projects.
* Team collaboration : colloborating with team members to share information, discuss project progress & updates
* written communication : drafting clear & concison reports doccumentation and emails related to data analytics process.
* conflict resolution : Addressing & Resolving conflicts within the team to maintain a positive and production environment between team members.
* Feedback Delivery : providing constructive feed back to pws. mentors & teachinques and receiving feed back ..i forsting a acture of contrining improment
* clarity in instructions : crearly communication project tasks, goles & expectations, role to every team members.

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 managerial skills acquired

* project managment : coordinating task, seeting goals and ensuring the timely completion of the data analystics projects.
* team collabaration : working effectively in the group setting , dilegating tasks & fastening and callaborative environment.
* Leadership skills : taking initiative, guidance the team and making decisions to achieve project objectives
* Time management : petrotizing tasks, meeting deadlines and efficiently allocating resources.
* problem solving as a team : Addressing challanges and finding solution through group collobration.
* Adapatability : Being flocible & adapting to changes in project scope or requirements.
* Quality arrvancy : ensuring the accuracy & quality of the data analystics project delivable produced team.
* Feedback & improvement : providing constructive feedback to team members & actively participating in continuous improvement process.

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 the data analysis at Smart bridge interns, I have identified key areas for enchancing my abilities in group discussions team participation and leadership.

Team to improve my contributions in group discussion, I aim to actively listen to others ask insight feel questions and share my opinions prespectives clearly & effectively As a team member, I plan to strengthen collaboration by peactively offecing support liveraging my technical skills and embarcing different view points or team I plan to focus on taking initiative, creating a positive team environment and efficiency coordinating team activities. Through the measures 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

IBM Cognos analytics : IBM cognos analytics is a business intelligence tool for managing and analysing data It integrater reporting, modeling analysis, dashboards, stories and event management to effectiectly organize data for effective recision making.

2) video based learning : interactive videos, 360 degrees view and live streaming.

3) visual studio code : visual studio code AKA VS code is a source code editor software developed by microsoft for windows, linux cacos. It is used for program code editing like dubbing task running and version control code refactoring.

4) Artificial intelligence : personalized learning adaptive assessments and intelligent tutoring.

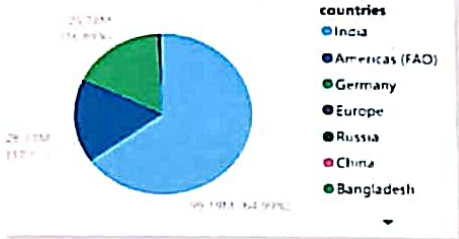
5) Cloud computing : scalable infrastructure collaborative tools and remote access

6) Gamification : engaging learning experience rewards and competation.

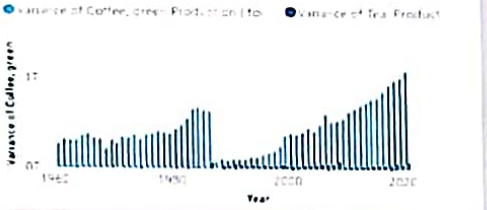
https://drive.google.com/file/d/17ltudVAFpt9x30R7yhJtPKKB_yXWwDOC/view?usp=drivesdk

ANALYSIS OF GLOBAL FOOD PRODUCTION FROM 1961 TO 2021

Average of Rice Production (tonnes) by countries

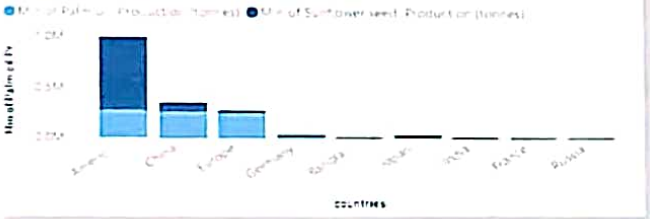


Variance of Coffee, green Production (tonnes) and Variance of Tea Production (tonnes) by Year

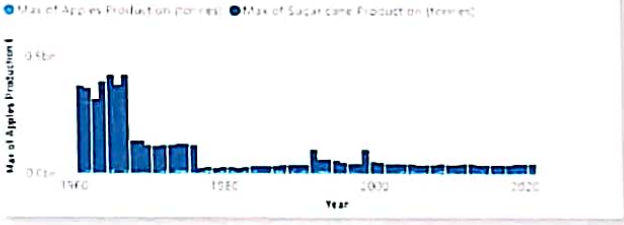


Median of Wheat Production (tonnes) and Median of Rice Production (tonnes) by Year

Min of Palm oil Production (tonnes) and Min of Sunflower seed Production (tonnes) by countries



Max of Apples Production (tonnes) and Max of Sugar cane Production (tonnes) by Year



Scanned with OKEN Scanner

GLOBAL FOOD PRODUCTION

35.00
Min of Sunflower seed Pr...

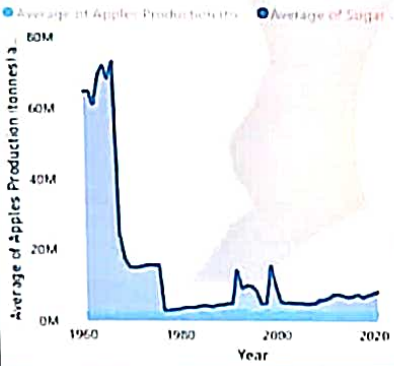
17.96M
Average of Rice Production (...

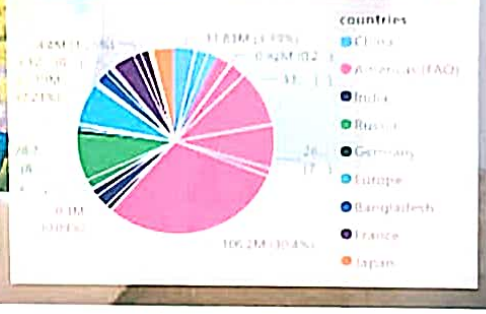
860.07K
Max of Tea Production (to...

10.53K
Median of Tea Production (tonn

countries	Rice Production (tonnes)
Americas (FAO)	1,77,35,464.00
Bangladesh	83,332.00
China	3,14,780.00
Europe	1,10,000.00
France	3.00
Germany	22,60,764.00
India	88,03,175.00
Japan	0.00
Russia	1,10,000.00

Average of Apples Production (tonnes) and Average of Sugar cane Production (tonnes) by Year



Global agricultural production amounts to approximately 11 billion tonnes of food, 32 million tonnes of natural fibres and 4 billion m^3 of wood. However, around 14% of the world's food is lost from production before reaching the retail level.

Median of Apples Production (tonnes), Median of Coffee, green Production (tonnes), Median of Palm oil Production (tonnes), Median of Potatoes Production ...