Objective of the Activity Done: What is data Analytics?

Detailed Report: and the process involved in data Analytics

In the first week learned about the defenition, Agenda and Steps to understand about data analyt -ics. Also discused about the problems and solutions to analyse the data and anaylsed the data based on steps as:

- Comparing the data
- Putting the data in virual
- breaking the data.

also understood the concepts of tools in data Analytics, which helps to store the data in efficient and secure manner

- SQL (structured Query Language)
- No SQL

DA technologies like -

• data mangement • data visulization

• predictive model

we also Learned abaut where this data Analytic is used (or) applied in various industies like Finance, retail trading, Agriculture and companies like uber use DA for growth.

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WEEK – 2 (From Dt.3/07/24. to Dt.12/07/24)

Objective of the Activity Done:

data analytics process and structure

Detailed Report: in the second week Learned about the different process that is required in data analytics, data cleaning and processing the data in a detailed manner and also the type of DA into 4 catogries like

- descriptive Analytics
- diagnostic Analytics
- predictive Analytics
- prescriptive Analytics

also learned about the challeges faced in the organization with the solutions, with Power BI in Action which gives visible insights and sales force forecasting also about the architecture of the BI which tells us about the structure of the data Analytics mainly teaches about DWH that is data wave housing and data bases

- collect - integrate - store - Analyse
- distribute and react with ETL tools.

Objective of the Activity Done:
data insights and flow of Power BI

Detailed Report: in the third week learned about the insights of data flow in Power BI which viewed the model and data, merges and tables in coloumns and rows with joint kind

- left outer (all from first, matching from second)
- right outer (from first to second)
- full outer (all rows from both)
- inner (only matching rows)
- left Anti (rows only in first)
- right Anti (rows only in second)

also learned about ETL tools in Power Query that is Extract transform load (ETL), which helps in extracting the data and transforming also learned about the data view and the model view for data modelling to generate Reports and insights also learned about the overhead. orderline in the process of Analysis in BI. reseached about table as an ETL tool.

Objective of the Activity Done:

Data Analytics expression (DAX)

Detailed Report: in the forth week. I learned about

the concept of DAX (data Analysis expression and filters in DAX.

Different class functions:

- Aggregate function → is blank, is number, is text
- text function → min, max, Average, sum....
- data function → Lower, upper Replace
- Logical function → date, date add, data diff
- counting function → and, or, NOT if
- information function → count, distinct count

in the end of forth week revised all the topics that were taught from the first day of the internship programme which helped me to attend the grand assesment test. After prepacing for the assesment test we gave Assesment test on all the topics we learned.

Objective of the Activity Done:

Power BI service and collaboration

Detailed Report:

The fifth week covered the power BI service and its collaboration features. we learned how to publish reports. we learned how to publish reports to the power BI service, share dashboards and collaborate with team member in real-time. The sessions emphasized data security, row-level security (RLS), and managing workspaces. we 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.

Objective of the Activity Done:
Best Practices and Industry Applications

Detailed Report:
In the sixth week of internship classes, we focused on based 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 business intelligence, sales analysis, financial reporting, and operational efficiency. The week wrapped up with an overview of the upcoming project work.

Objective of the Activity Done:

Project work - Data Analysis and Visu -alization

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 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.

WEEKLY REPORT

WEEK-8 (From Dt..19/08/24............. to Dt.23/08/24.................)

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 dash -boards 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 demonstarted how the insights could be applied to solve real business problems. The project was well received, marking a sucessful Conclusion to the internship.