

## WEEKLY REPORT

WEEK - 1 (From Dt. 3/7/24 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.

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 appending dataset.

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

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



Objective of the Activity 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 visualize 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 Customizing visual elements, using themes, and enhancing reports with interactive features like slicers and drill-throughs.

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.



**Objective of the Activity Done:**

Power BI service and Collaboration

**Detailed Report:**

The fifth week covered the Power BI service and its collaborations features.

We 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.

We also explored power BI's integrations with other microsoft skills. tools. like Excel, Teams, and share point, making it easier to collaborate and share insights across the organization.

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 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 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 interuz. cleaning and transforming the data and building a data models.

Our team focused 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.

**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 internship.