Maharaja Surajmal Institute of Technology

Report on FDP on "Microsoft Power BI Data Analyst Associate"

Name of the Expert	**Mr. Mohammad Aadil Sheikh Afsar**
Date and Time	**16/3/2026-20/3/2026 (9.30 am to 3.00 pm)**
Target Audience	**Faculty**
Total	**25**
Organized By	**ICT Academy in collaboration with CSE & IT Department**
Venue	**Maharaja Surajmal Institute of Technology**

Introduction

CSE & IT Department, along with ICT Academy organized an FDP on Microsoft Power BI and its Tools to enhance the knowledge and practical skills of faculty members in the domain of data analytics and business intelligence.

In today's data-driven world, the ability to interpret and visualize data effectively is essential for academic and industrial growth. This FDP aimed to bridge the gap between theoretical knowledge and real-world data analytics applications by providing hands-on training using Power BI. The program was designed to equip participants with modern tools and techniques used in industry for data visualization and reporting.

Objectives

The key objectives of the FDP were:

- To introduce the concept of Business Intelligence and its importance
- To provide hands-on experience with Microsoft Power BI
- To develop skills in data cleaning and transformation
- To enable participants to design interactive dashboards
- To promote the use of analytics tools in teaching and research
- To familiarize participants with industry-relevant tools and practices

Overview of Microsoft Power BI

Microsoft Power BI is a powerful business analytics tool that enables users to visualize data and share insights across an organization. It allows users to connect to multiple data

sources, transform raw data into meaningful information, and create interactive dashboards and reports.

Power BI consists of several components including Power BI Desktop, Power BI Service, and Power BI Mobile. These tools help users analyze data efficiently and present it in a visually appealing manner.

Session Highlights

The FDP consisted of multiple sessions covering both theoretical and practical aspects of Power BI.

The initial sessions focused on understanding Business Intelligence concepts and the role of data analytics in decision-making. Participants were introduced to the Power BI interface and learned how to connect to various data sources.

Subsequent sessions emphasised data cleaning and transformation using Power Query Editor. Participants practised removing inconsistencies, handling missing data, and formatting datasets.

Advanced sessions included data modelling, creating relationships between tables, and a basic introduction to DAX (Data Analysis Expressions). Participants also explored various visualization techniques and created dashboards using real datasets.

Tools and Technologies Covered

The FDP covered a wide range of tools and features within Power BI:

- Power BI Desktop for report creation
- Power Query Editor for data transformation
- Data Modeling techniques
- DAX basics for calculations
- Visualization tools such as charts, graphs, and maps
- Dashboard design and report publishing

These tools helped participants understand the complete workflow of data analysis from raw data to final visualization.

Hands-on Practice

A significant part of the FDP was dedicated to hands-on learning. Participants worked on real-world datasets and created interactive dashboards.

They learned how to apply filters, slicers, and drill-through features to make reports more interactive. This practical exposure helped participants gain confidence in using Power BI independently for academic and research purposes.

Learning Outcomes

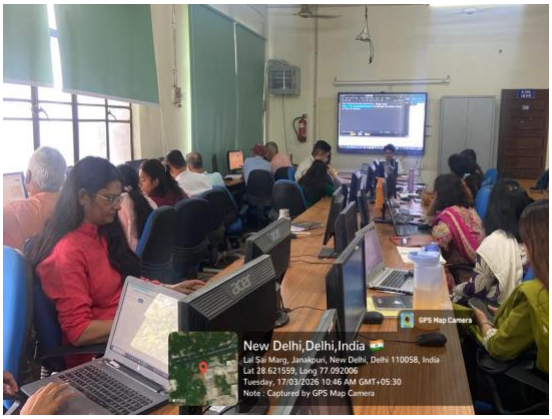
By the end of the FDP, participants were able to:
• Understand Business Intelligence concepts
• Import and transform data using Power BI
• Create various visualizations and reports
• Develop interactive dashboards
• Apply analytical thinking to real-world problems
• Use Power BI as a teaching and research tool

Participant Feedback

Participants appreciated the structured approach of the FDP and the practical orientation of the sessions. The hands-on activities were particularly beneficial in understanding the concepts clearly.Many participants expressed interest in incorporating Power BI into their curriculum and research work. The FDP also encouraged collaboration and knowledge sharing among faculty members.

Conclusion

The Faculty Development Program on Microsoft Power BI and its Tools was highly successful in achieving its objectives. It provided valuable insights into modern data analytics techniques and equipped participants with practical skills required in today's academic and industrial environments.



Prof. Koyel Datta Gupta & Dr. Manoj Malik

Co-ordinator, ICT Academy