



# **SPYPRO SECURITY SOLUTIONS Pvt. Ltd.,**

C Y B E R S E C U R I T Y

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## **5-Day Workshop on Power BI with Generative AI**

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### **Day 1: Power BI & Data Fundamentals**

#### **Session 1: Introduction to Power BI**

- What is Power BI? Importance & business use cases
- Power BI ecosystem (Desktop, Service, Mobile)
- Connecting to data sources (Excel, CSV, Database)
- Data loading & basic transformations

#### **Hands-On**

- Installing Power BI Desktop
  - Importing datasets
  - Creating basic charts & tables
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### **Session 2: Data Cleaning & Modeling**

- Power Query Editor basics
- Data cleaning & transformation
- Data modeling & relationships
- Star schema concept

#### **Hands-On**

- Cleaning raw data
  - Creating relationships between tables
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### **Day 2: DAX & Dashboard Development**

#### **Session 1: DAX Fundamentals**

- Introduction to DAX
- Calculated columns & measures
- Common DAX functions (SUM, COUNT, IF, CALCULATE)

- KPIs & business metrics

### **Hands-On**

- Writing DAX measures
  - Creating KPIs & metrics
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## **Session 2: Advanced Visualizations**

- Power BI visuals & customization
- Filters, slicers & drill-through
- Interactive reports & storytelling

### **Hands-On**

- Designing interactive dashboards
  - Implementing drill-down analysis
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## **Day 3: Power BI Service & Automation**

### **Session 1: Power BI Service**

- Publishing reports to Power BI Service
- Dashboards & workspaces
- Data refresh & scheduling
- Sharing & access control

### **Hands-On**

- Publishing reports to cloud
  - Sharing dashboards securely
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### **Session 2: Performance & Optimization**

- Report performance best practices
- Optimizing DAX & visuals
- Managing large datasets

### **Hands-On**

- Optimizing slow dashboards
  - Improving report performance
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## **Day 4: Generative AI Integration**

### **Session 1: Generative AI in Power BI**

- Introduction to Generative AI concepts
- Power BI Copilot overview
- AI visuals & smart insights
- Natural language Q&A

### **Hands-On**

- Using Copilot to generate insights
  - Asking questions in natural language
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### **Session 2: AI-Driven Business Use Cases**

- Power BI + Gen AI in business analytics
- Automated narratives & summaries
- Predictive insights overview

### **Hands-On**

- Creating AI-generated report summaries
  - Business insights using AI
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### **Day 5: Project Development & Future Scope**

#### **Session 1: Project Development**

- End-to-end dashboard development
  - Applying DAX, visuals & AI features
  - Best practices in BI reporting
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#### **Session 2: Presentation & Closing**

- Project demos & presentations
  - Challenges & solutions discussion
  - Future trends: AI-Driven Analytics, Copilot, Auto Insights
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### **Capstone Project Example**

#### **AI-Powered Business Analytics Dashboard**

- **Data Sources:** Excel / CSV / Database
- **Features:** Interactive dashboards , DAX-based KPIs , AI-generated insights & narratives , Natural language Q&A

#### **Tools Used:**

- Power BI Desktop
  - Power BI Service
  - DAX
  - Generative AI (Copilot, AI visuals)
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### **Closing Session**

- Certificates distribution
- Feedback & Q&A