TECRIONIX

Decision Intelligence with Power BI:

Live Online & On-site Training Program | 21 Hours
From zero to decision-ready dashboards

Training Program Overview

Power BI is Microsoft's business intelligence tool for connecting to data, shaping it, modelling it, and turning it into interactive reports that an organization can trust and share.

It has three components:

1. **Power BI Desktop**, the free authoring tool where data is prepared with Power Query, modelled with DAX, and visualized;
2. **Power BI Service**, the cloud workspace where finished reports are published, refreshed, and shared;
3. **Power BI Mobile,** for viewing reports on the go.

Around 90% of a report builder's time is spent in Desktop, and this program is built around it.

This program assumes no prior Power BI knowledge. It follows the natural workflow of a report builder, from installing Power BI Desktop to publishing and sharing a finished report, so that each module builds on the one before it. By the end you will be able to take a raw business dataset and deliver an executive-ready report on your own.

Through guided demonstrations, practical exercises, and a finance-flavored capstone project, you will:

- Connect, clean, and shape data with Power Query to create reporting-ready tables.
- Design star-schema semantic models that support consistent, reusable reporting.
- Write DAX measures and business calculations with proven best practices.
- Build interactive, well-designed reports that make trends, drivers, and comparisons easy to read.
- Use the AI features built into Power BI Desktop to speed up analysis and report building.
- Publish reports to the Power BI Service, set up refresh, and share them with your team.

Led by experienced BI practitioners, this program is designed for professionals who want to reduce manual reporting effort, improve insight quality, and deliver dashboards that stakeholders trust for decision-making.

Key Capabilities you are expected to build:

By the end of this training, you are expected to:

- Work confidently in Power BI Desktop across its Report, Table, Model, DAX query, and DAX Query views
- Build repeatable Power Query transformations and read the M code behind the steps
- Design a clean star-schema model with correct relationships, a date table, and well-organized measures
- Apply DAX, evaluation context, and time intelligence to solve common business reporting needs
- Convert complex data into clear, executive-ready dashboards that follow visualization best practices
- Use AI visuals and Copilot inside Power BI to find and explain insights faster
- Publish reports, apply row-level security, schedule refresh, and share with the right people
- Spot and fix common causes of slow reports using Power BI Desktop's built-in tools
- Strengthen your career profile with practical, in-demand Power BI capability

Training Modules:

Module 01: Introduction to Business Intelligence & Power BI

- Understand Business Intelligence (BI) concepts and the self-service BI workflow
- See where Power BI sits among BI tools and why BI matters in modern organizations
- Overview of the Power BI components: Desktop, Service, and Mobile
- Overview of licensing: Free, Pro, and Premium Per User, and what each lets you do
- Install Power BI Desktop and tour the interface: ribbon, panes, and the Report, Table, Model, DAX query, and TMDL views
- Learn the end-to-end workflow: get data, transform, model, visualize, publish, share
- Know the file formats: .pbix, .pbit templates, and an overview of the .pbip project format
- Understand the role of Power BI in effective business decision-making

Module 02: Getting & Transforming Data with Power Query

- Understand ETL (Extract, Transform, Load) and where Power Query fits
- Connect to common sources: Excel, CSV, folders, SharePoint, SQL Server, and the Web
- Compare Import, DirectQuery, and Live Connection modes and when each is used
- Navigate the Power Query Editor: queries pane, Applied Steps, data preview, and query settings
- Set correct data types and use data profiling tools: column quality, distribution, and profile
- Apply core transformations: promote headers, remove and rename columns, split, replace, fill, filter, and sort
- Reshape data with unpivot, pivot, group by, transpose, and conditional columns
- Distinguish between the Transform and Add Column tabs
- Combine data with Merge (joins) and Append, and combine files from a folder
- Add and manage parameters in queries, and understand query folding basics
- Read M code in the Advanced Editor and build custom columns with common M functions
- Apply query organization basics: naming, grouping, and disabling load for staging queries

Module 03: Data Modelling and Semantic Models

- Grasp the importance of data modelling in BI and what a semantic model is
- Understand normalization vs. denormalization
- Identify fact and dimension tables, primary and foreign keys
- Compare star schema and flat table designs, and why star schema is preferred
- Set up relationships: cardinality, cross-filter direction, active vs. inactive, and filter flow
- Build and mark a Date table, and understand why auto date/time should be turned off
- Introduce role-playing dimensions (inactive relationships) and many-to-many relationships
- Use Model view effectively: layouts, properties pane, display folders, hiding fields, and data categories
- Create hierarchies, format strings, sort-by columns, and field parameters
- Introduce the TMDL view: see the model as code, script a table or measure, and make a simple edit

Module 04: Data Analysis with DAX

- Introduction to DAX (Data Analysis Expressions): syntax, data types, and operators
- Differentiate between calculated columns, measures, and calculated tables
- Understand evaluation context: row context, filter context, and context transition
- Apply aggregation functions: SUM, AVERAGE, MIN, MAX, COUNTROWS, DISTINCTCOUNT, and DIVIDE
- Use CALCULATE with filter modifiers: ALL, ALLEXCEPT, REMOVEFILTERS, KEEPFILTERS, and USERELATIONSHIP
- Work with iterators (SUMX, AVERAGEX, RANKX) and logical functions (IF, SWITCH, AND, OR, COALESCE)
- Use relationship and table functions: RELATED, FILTER, VALUES, DISTINCT, SUMMARIZE, and ADDCOLUMNS
- Write readable, testable formulas with variables (VAR / RETURN)
- Apply time intelligence: TOTALYTD, SAMEPERIODLASTYEAR, DATEADD, DATESINPERIOD, and custom period comparisons
- Use the DAX query view: write simple EVALUATE queries, test measures, and apply a measure change back to the model
- Overview of visual calculations and when they are simpler than measures
- Follow DAX best practices and discover resources for mastering DAX

Module 05: Building Interactive Dashboards

- Navigate Report view: Visualizations, Filters, Data, and Format panes
- Build the core visuals: table, matrix, card, bar and column, line and combo, pie and donut, scatter, waterfall, treemap, KPI, gauge, and maps
- Add slicers (list, dropdown, date range, button slicer) and use the Filters pane at visual, page, and report level
- Control visual interactions, sorting, and drill-down, drill-up, and expand on hierarchies
- Set up drill-through pages
- Use bookmarks, buttons, and page navigation to build guided experiences
- Design tooltips and report page tooltips
- Apply conditional formatting: data bars, icons, color scales, and rule-based formatting
- Use the Analytics pane: trend lines, constant lines, min/max/average lines, and forecasting
- Work with themes, page layouts, and canvas settings, and an overview of the mobile layout
- Add certified custom visuals from AppSource when a built-in visual does not fit

Module 06: Data Visualization Best Practices

- Distinguish between dashboards and reports and the purpose of each
- Select appropriate visuals for comparison, trend, composition, distribution, and relationship
- Lay out a page with clear hierarchy: KPIs first, context second, detail last
- Format reports for clarity and impact: titles, labels, number formats, and alignment
- Avoid clutter and use color deliberately, including accessibility and color-blind safe palettes
- Design executive KPI pages and performance scorecards
- Tell a story with data: context, comparison, and the so-what
- Build a reusable report template and theme for consistent organizational reporting

Module 07: Working Smarter with AI Assistants (ChatGPT, Claude etc)

- Understand what AI assistants are, and how they support everyday Power BI work
- Use AI as a reporting partner: explain data, suggest report layouts, and draft summaries and commentary for management
- Get help writing, explaining, and fixing DAX measures and Power Query steps in plain business language
- Speed up documentation: let AI describe measures, suggest clear names, and explain a report to new users
- See how Claude Code and MCP connect AI directly to Power BI, so it can read a model and help build or update measures and reports under your direction
- Write clear prompts and check AI answers before they reach a report
- Use AI responsibly: data privacy, company policies, and what should never be shared with an AI tool

Module 08: AI Features in Power BI

- Utilize AI visuals: Key Influencers, Decomposition Tree, and Smart Narrative
- Apply anomaly detection
- Leverage the Analyze feature: explain the increase or decrease and find where the distribution is different

Module 09: Power BI Service, Security & Report Sharing

- Introduction to the Power BI Service and signing in with an organizational account
- Understand what you see in the Service: workspaces, semantic models, reports, dashboards, and apps
- Publish from Desktop, pin visuals to a dashboard, and understand dashboards vs. reports within the Service
- Create a workspace and understand the workspace roles: Admin, Member, Contributor, Viewer
- Share reports with links, direct access, and apps
- Implement row-level security (RLS): define roles in Desktop, assign users in the Service, and test as role
- Overview of the data gateway and why it is needed to refresh on-premises files and databases
- Set up scheduled refresh, check refresh history, and an overview of incremental refresh

- Overview of the Power BI Mobile app, report subscriptions, and data alerts
- Export and reuse: export to PowerPoint and PDF, Analyze in Excel, and an overview of paginated reports (Report Builder)

Module 10: Performance Optimization & Best Practices

- Diagnose slow visuals with Performance Analyzer and the Optimize ribbon
- Reduce model size: remove unused columns, prefer measures over calculated columns, and use integer keys
- Understand the basics of how Power BI compresses and stores data, and why column cardinality matters
- Use DAX efficiently: variables, avoid unnecessary iterators, and filter columns rather than tables
- Keep Power Query fast with query folding and by pushing work to the source
- Improve report speed using aggregations and good semantic model design
- Document models with measure descriptions, display folders, and naming standards

About Your Trainer



Muhammad Imran

BI Consultant | Corporate Trainer | Power BI | Excel

16+ years of professional experience · 8+ years in Business Intelligence · Pakistan, the Middle East and Southeast Asia

Muhammad Imran is an experienced **Business Intelligence Consultant and corporate trainer with over 16 years** of professional experience, including over 8 years specializing in Business Intelligence, analytics, reporting automation, and data-driven transformation.

He has conducted on-site and online corporate training for hundreds of professionals across diverse business functions. His training approach emphasizes simplifying complex concepts through practical, real-world business scenarios, enabling participants to confidently apply the skills in their day-to-day work.

He has worked across Pakistan, the Middle East, and Southeast Asia, delivering Power BI solutions across diverse industries and business functions. His expertise spans Finance, FP&A, Treasury, Supply Chain, Retail, Sales, Inventory, HR, and Operations, combining strong business understanding with hands-on technical expertise.

Training Approach

Hands-on, scenario-based learning using practical business examples, with an emphasis on building participants' confidence and ability to independently develop and maintain Power BI reports and dashboards.

Microsoft Certifications

- Microsoft Certified: Power BI Data Analyst Associate *(PL-300)*
- Microsoft Certified Solutions Associate: BI Reporting *(MCSA)*
- Microsoft Office Expert: Microsoft Excel 2016 *(MOS Excel)*
- Microsoft Office Specialist: Microsoft Outlook 2016 *(MOS Outlook)*

Selected Projects and Business Impact

Portfolio Performance & Investment Visibility — Saudi Arabia

At **Majd Development & Investment Company (Al Majdouie Group)**, established a structured reporting framework for multi-asset portfolios, giving investment leadership clearer visibility into portfolio performance, AUM, and investment decision-making.

Finance Transformation & Reporting Automation — UAE

At **Desertcart**, a Dubai-headquartered global e-commerce company serving 100+ countries, supporting Finance transformation by replacing manual reporting with automated management

reporting across month-end, revenue, cost, P&L, Balance Sheet, Cash Flow, budgeting, treasury, and profitability.

Telecom Analytics — Bahrain

At **Batelco**, Bahrain's leading telecommunications company and part of the Beyon Group, delivered Power BI analytics across subscriber base, utilization, traffic, and revenue, strengthening business visibility, reporting performance, data security, and stakeholder decision-making.

Retail Performance & Enterprise Visibility Across Southeast Asia

At **GMG**, a Dubai-headquartered global retail and well-being group operating across 20 countries, led regional BI delivery from Kuala Lumpur across Finance, FP&A, Treasury, Supply Chain, Retail, HR, Procurement, and Operations. Delivered 20+ Power BI dashboards for hundreds of users, reducing manual reporting effort by 60%.

Pharmaceutical Supply Chain Transformation — Pakistan

At **Highnoon Laboratories**, delivered Power BI solutions across planning, production, inventory, sales, and distribution for 350+ SKUs, supporting transformations that contributed to a 20% increase in production and 15% growth in secondary sales. At **Global Pharmaceuticals**, delivered Power BI reporting across five manufacturing plants and 400+ SKUs.

Enroll or Arrange This Training for Your Team

This program runs as public batches and as private training for companies, delivered live online or on-site. To enroll, or to discuss a session tailored to your team, contact us:

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