POWER BI FOR DATA ANALYST

LIVE TRAINING COURSE

Module 1 of Power BI from Rookie to Rock Star training

2-Days (full-day) or 4-Days (half-day)

Instructors: Leila Etaati & Reza Rad

Microsoft® MVP Most Valuable Professional

This training is designed for data analysts, who have the data modeled and ready for them to visualize. In this training, you will learn detailed visualization practices of Power BI.

In this two days training, you will learn all components of Power BI needed for building Power BI reports and dashboards. You will learn about components such as Get Data (Power Query), Modeling and DAX, and Visualization. You will also learn about the Power BI service (website), and components that are needed to share your reports with others.

The training continues with more focus on Visualization components such as different types of charts and visuals and scenarios to use them. You will also learn about advanced visualization techniques such as designing mobile reports, changing the interactivity of visuals, detailed learning of slicers and filters, creating parent-child reports, etc.

At the end of this training, you will be able to do all visualization requirements for Power BI and will understand all other components of Power BI and how these are all working together.

ABOUT THE INSTRUCTORS

Our trainers, **Reza and Leila,** are the world's well-known names in the Microsoft BI field. They are best-selling authors of more than ten Power BI books, invited speakers to the world's best and largest Power BI conferences, and they are both consultants dealing with Power BI challenges on real-world projects. They designed the course content themselves and delivered it to thousands of users worldwide.

Reza Rad is a Microsoft Regional Director, an Author, Trainer, Speaker, and Consultant. He has a BSc in Computer engineering; he has more than 20 years of experience in data analysis, BI, databases, programming, and development mostly on Microsoft technologies. He is a Microsoft Data Platform MVP for 11 continuous years (from 2011 till now) for his dedication in Microsoft BI. Reza is an active blogger and co-founder of RADACAD. Reza is also co-founder and co-organizer of Difinity conference in New Zealand, and the Power BI Summit (the biggest Power BI conference)

Dr. Leila Etaati is the first Microsoft AI MVP in New Zealand and Australia, She has a Ph.D. in Information Systems from the University Of Auckland. And she has been working with information systems since 20 years ago. She is the Co-director and data scientist in RADACAD She is the co-organizer of Power BI and Analytics user group (meetup) in Auckland with more than 2500 members,.
She is the co-director of conferences such as the Difinity Conference (2017 till now) and the Power BI Summit (the biggest Power BI conference). She is a Data Scientist, BI Consultant, Trainer, and international Speaker. She is one of the very few AI and Data Platform Dual Microsoft MVPs in the world. Leila is an active Technical Microsoft AI blogger for RADACAD.

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FORMAT OF THE COURSE:

We run the courses either full-days or in half-days. If it runs Full-day. There will be four sessions of 1.5 hours each with the timing below;

- 09:00 – 10:30: course, lecture, and lab
- 10:30 – 11:00: break
- 11:00 – 12:30: course, lecture, and lab
- 12:30 – 13:30: lunch break
- 13:30 – 15:00: course, lecture, and lab
- 15:00 – 15:30: break
- 15:30 – 17:00: course, lecture, and lab

We also run it as half-days when we deliver it online/remote. We found this is more useful for attendees for remote training. Half day trainings are two sessions of 1.5 hours with a 30 minutes break in between, which runs in four days.

AGENDA:

The training includes but is not limited to the topics below:

1.1: Introduction to Power BI

Power BI is the newest Microsoft Business Intelligence and Data Analysis tool. In this module, we will go through the basics of this product and introduce all components of Power BI (Power Query, Power Pivot, Power View, and Power Q&A). You will see some demos and introductions about Power BI desktop, Office 365 Power BI subscription, and Power BI website, and mobile apps. You will see some basic demos of how easy it to use is Power BI in some scenarios.

- Introduction to Power BI: What is Power BI?
- Power BI Desktop; The First Experience
- Power BI Website; You'll Need Just a Web Browser
- Introduction to Power BI Components: Power Query, Power Pivot, Power View, and Power Q&A.

1.2: Getting Data and Transformation

Getting Data is the first experience of working with Power BI. You can connect to many data sources on-premises or on the cloud. In this section, you will learn how the Get data experience in Power BI is and how you can transform the data in a way to get it ready for modeling

- What is Power Query: Introduction to Data Mash-Up Engine of Power BI
- Different versions of Power Query
- Power Query Introduction
- Query Editor
- Transformation GUI
- Get Started with Power Query: Movies Data Mash-Up
- Power BI Get Data from Excel: Everything You Need to Know
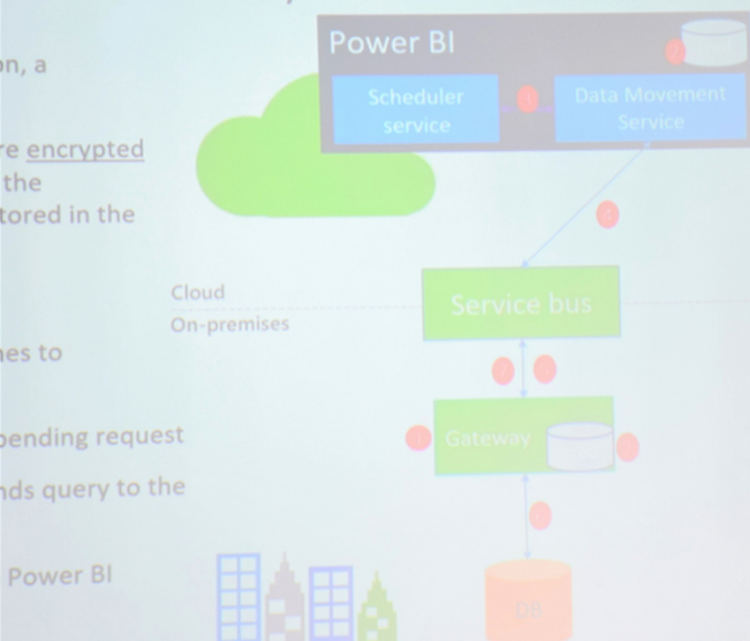- What is the Role of Power Query in a Power BI Solution

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1.3: Data Modelling and DAX

Data Modelling in Power BI is an in-memory-based technology. You will learn about the structure of modeling in Power BI, and you will learn the importance of relationships and their direction. You will also learn about calculations in Power BI and how to write them. DAX is the Data Analytical eXpression language. DAX has a similar structure to excel functions, but it is different. In this module, you will learn DAX about DAX too.

The content that you will learn in this module includes but is not limited to;

- Power BI xVelocity engine basics and concepts
- Relationships in Power BI
- Hierarchies and Formatting
- Sorting by other columns
- Date Table
- Introduction to DAX
- Calculated Columns, Measures, and Calculated Tables
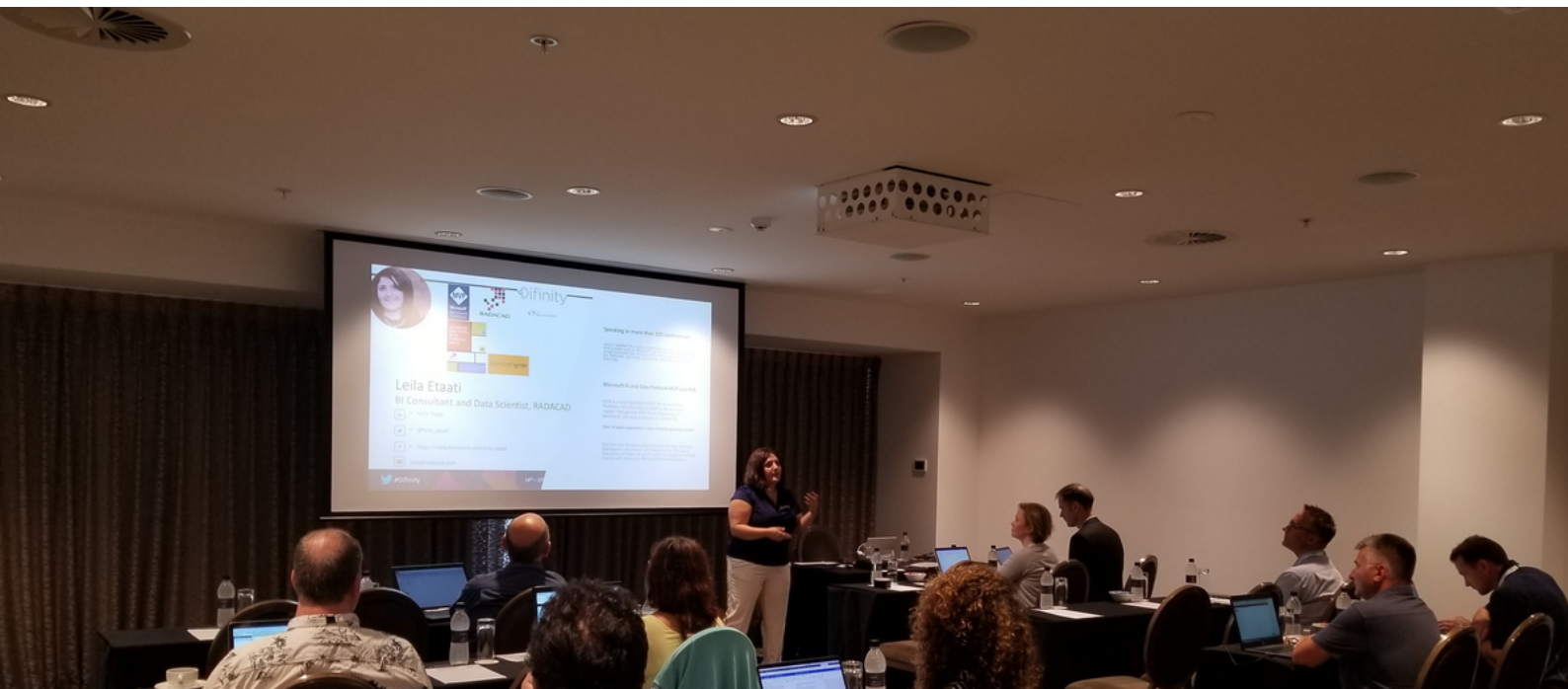
1.4: Data Visualization

Data Visualization is the front end of any BI application; this is the user viewpoint of your system. It is critical to visualize measures, and dimensions effectively so the BI system could tell the story of the data. In this module, you will learn conceptual best practices of data visualizations which are valid through all data visualization tools. You will learn Power BI visualization skills. You will learn how to create effective charts, and dashboards using these tools as well as best practices for working with Power BI Desktop.

The content that you will learn in this module includes but is not limited to;

- Power BI Desktop Visualization
- Formatting Visuals in Power BI Desktop
- Basic Charts and Visuals in Power BI
- Sorting, Filtering, and categorization
- Custom Visuals in Power BI Desktop
- Maps and Geo-Spatial Visualization

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1.5: Power BI Service

Power BI components can be deployed into different environments such as the Power BI website, Office 365 subscription, or even SharePoint on-premises. In this module, we will go through deployment options, Configurations, and requirements required for each environment. You will learn how to deploy your Power BI files into the Power BI website. You will also learn how to build dashboards on the website, and how to work with Mobile Apps for Apple, Android, and Windows Phone.

The content that you will learn in this module includes but is not limited to;

- Basic Sharing and using workspaces in Power BI web site
- Dashboard vs. Report
- Power Q&A
- Mobile Dashboard Design
- Row Level Security
- Schedule Refresh vs. Other types of connections
- Gateway's Role in the Service

1.6: Visualization Basics

Visualization is an important part of any BI system. In Power BI, Visualization plays a critical part. In this section, you will learn about why visualization is important, with few basics of visualizations such as comparing stacked vs. clustered charts. You will also learn in this section about data exploration techniques such as drill down/up, using pages, etc.

- Importance of Visualization
- Basic Charts; Bar and Column Charts
- Clustered vs. Stacked Charts
- Q&A for Reports
- Quick Measures in Power BI
- Drill Down and Up using visuals and hierarchies
- Pages

1.7: Slicing and Dicing

The importance of slicing and dicing data in Power BI is critical. Power BI is not a visualization tool only, but it is also a data exploration tool. There are several ways you can filter the data. In this section, you will learn the difference between filters and slicers. You also learn about different scopes of filtering, as well as filtering modes. For slicers, you will learn different types of slicers and some advanced features such as syncing slicers through different pages.

- Filters
- Scopes of Filters: Visual Level, Page Level, Report Level
- Modes of Filtering: Basic, Advanced, Relative, Top N
- Drill through Page Filter: Creating master-details page scenario in Power BI
- Slicers
- Types of Slicers; Date, Text, Number
- Slicer Formatting
- Syncing Slicer between Pages

1.8: Advanced Visualization in Power BI

Know that you know about visualizations and slicing and dicing, it is a good time to talk about some advanced techniques which will take your visualizations to the next level in Power BI. You will learn about techniques such as changing the interaction of visuals, report page tooltips, Bookmarks, and dynamic visualizations in this section.

- Report Page Tooltip
- Controlling the interaction of Visuals in a page
- Designing Power BI reports for Mobile
- Grouping and Binning
- Bookmark; saving the state of a page
- Buttons; action items
- Selection pane; visibility control in Power BI
- Golden triangle; Bookmark, button, and selection pane
- Colour theme or pallets in Power BI

1.9: Best Practice Scenarios of Using Visuals

It is a good time to learn about all built-in visuals in Power BI now. It is important to know which visual should be used in what scenario. You will also learn in this section about the pros and cons of each visual. You will learn specific features of the visual that can help to solve real-world scenarios. All the examples will be hands-on.

- Line Chart; Trend Analysis
- Combo Charts; Different Scales in one graph
- Ribbon Chart; Ranking
- Waterfall Chart; Cashflow
- Scatter Chart; Storytelling with the data
- Grouping charts: Pie, Donut chart, and Treemap charts
- KPI visual
- Gauge
- Card Visual
- Table and Matrix; showing the numbers with conditional formatting

1.10: Geo Location Visualization: Map Visuals

In Power BI, there are multiple ways of visualizing items on the map. In this section, you will learn about all the built-in ways of using map visuals in Power BI, the pros, and cons of each method, and special considerations for some of the visuals.

- Map Visual; Using Bing to find spots
- Fine Tuning Address Details
- Map Visual; Using Latitude and Longitude
- Filled Map; Regions and Polygons
- Data Category importance for the filled map
- Shape Map; Having custom map visual
- ArcGIS Map; Map visual which can do everything

1.11: Custom Visuals

In addition to the built-in list of Power BI visuals, you can leverage some of the third-party visuals created by other companies called Custom Visuals. Creating custom visuals is a developer topic, which we won't discuss in this training, but you will learn about how to use custom visuals. You will learn about the most useful custom visuals in Power BI through many demos.

- Adding and using a custom visual
- Infographic Designer
- Tachometer Gauge
- Map custom visuals
- Certified custom visuals
- Hierarchy Slicer
- Play Axis
- R Custom Visuals

WHAT ATTENDEES WILL RECEIVE AFTER THIS TRAINING?

- All data files and Power BI files related to demos and examples
- the Handout of the training
- access to the video training version of this course recorded separately. To be watched at your own pace. This worth $260 USD per module per user, but available complimentary to our live course attendees.
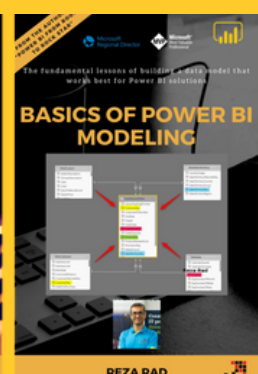- Certificate of completion

WHY IS THIS THE BEST TRAINING AVAILABLE FOR POWER BI?

- The content is created and updated directly by Reza Rad and Leila Etaati with years of experience with Microsoft BI and Power BI products. They are authors of more than 10 best-selling books on Power BI.
- The sample of list of companies who have purchased our training program
- The amazing 5-star feedback from attendees of our training shows the level of learning.
- This is the only Power BI training program in the world covering 7 modules and all aspects of Power BI learning for up to 10 days of training.

POWER BI FROM ROOKIE TO ROCK STAR

This is the most comprehensive course for Power BI on the planet which is split into modules. You can enroll in any of these modules separately or take the whole course.

Modules are designed independently, which means each module can be taken regardless of the order of modules. Here are a list and detailed agenda of each module:

- Module 1: Power BI for Data Analysts (2 days)
- Module 2: Data Modeling with Power BI (1 day)
- Module 3: Power Query: Get data and transform (2 days)
- Module 4: DAX and Calculations in Power BI (2 days)
- Module 5: Power BI Design Patterns (1 day)
- Module 6: Power BI Architecture (1 day)
- Module 7: Power BI for AI and Data Scientists (2 days)

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