Faysal Aziz

Analytics and ETL using Power Query and Power Pivot in MS Excel

FA-0096 · 10-day

Data & Analytics

Introduction

Welcome to the Power Query, Power Pivot, and VBA training course, tailored specifically for professionals in the financial industry. With over 20 years of industry experience, our expert trainers have designed this course to be commercially applicable and highly relevant, ensuring that you receive practical knowledge instead of just theoretical concepts. By the end of this course, you will be proficient in using Power Query, Power Pivot, and VBA to create efficient financial applications, perform Extract, Transform, Load (ETL) operations, and address real-world business challenges.

This comprehensive 10-day course is designed to provide a strong foundation in Power Query, Power Pivot, and VBA programming for financial professionals. By the end of this course, participants will have the skills and knowledge necessary to create efficient and effective financial applications, perform ETL operations, analyze and visualize data, automate routine tasks, and integrate their applications with databases. With a focus on commercial applicability and practical, hands-on learning, this course will equip participants with valuable tools and techniques to enhance their careers in the financial industry.

Learning outcomes

Upon completion of this course, participants will be able to:

- Understand the fundamentals of Power Query, Power Pivot, and VBA in Excel.
- Design, develop, and debug effective financial applications using VBA.
- Apply ETL concepts to import, clean, transform, and load financial data.
- Utilize Power Query and Power Pivot to analyze and manipulate financial data.
- Create interactive user interfaces and data visualization tools for financial applications.
- Automate routine tasks, improving efficiency and reducing human error.

Prerequisites

Before attending this course, participants should have:

- A basic understanding of programming concepts (variables, loops, conditional statements, etc.)
- Familiarity with Microsoft Excel, as it will be used extensively during the course.
- Basic knowledge of financial concepts and terminologies.

Training outline

1. Day 1: Introduction to Excel, Power Query, and Power Pivot

1.1. Overview of Excel, Power Query, and Power Pivot in the financial industry

1.2. Understanding the Excel environment and Ribbon

1.3. Introduction to VBA and the Visual Basic Editor

1.4. Power Query and Power Pivot fundamentals

2. Day 2: Power Query for ETL in Finance

2.1. Introduction to ETL concepts

2.2. Connecting to various data sources

2.3. Data cleaning and transformation techniques

2.4. Loading data into Excel or Power Pivot

3. Day 3: Advanced Power Query Techniques

3.1. Conditional columns and custom transformations

3.2. Merging and appending queries

3.3. Error handling and debugging in Power Query

3.4. Practical exercises: building a financial ETL process

4. Day 4: Power Pivot for Data Analysis

4.1. Introduction to Power Pivot and Data Model

4.2. Creating relationships between tables

4.3. Calculated columns and measures using DAX

4.4. Analyzing financial data with Power Pivot

5. Day 5: Advanced Power Pivot Techniques

5.1. Time intelligence functions in DAX

5.2. KPIs and hierarchies in Power Pivot

5.3. Advanced data analysis techniques

5.4. Practical exercises: building a financial data model

6. Day 6: VBA Fundamentals and Programming Concepts

6.1. VBA language fundamentals (variables, data types, operators, and expressions)

6.2. Conditional statements and loops in VBA

6.3. Procedures and functions in VBA

6.4. Practical exercises: building simple financial applications with VBA

7. Day 7: VBA User Interface Design and Development

7.1. Understanding user interface design principles

7.2. Building interactive user interfaces for financial applications with VBA

7.3. Form controls and event-driven programming

7.4. Practical exercises: designing a user-friendly financial application with VBA

8. Day 8: VBA Database Integration and Data Manipulation

8.1. Connecting to databases using VBA

8.2. Reading, writing, and updating financial data in databases

8.3. VBA data manipulation techniques using Excel

8.4. Practical exercises: integrating a financial application with a database using VBA

9. Day 9: Automation and Task Scheduling with VBA

9.1. Introduction to automation and task scheduling

9.2. Automating repetitive tasks in financial applications with VBA

9.3. Scheduling tasks and generating reports using VBA

9.4. Practical exercises: automating a financial report generation process with VBA

10. Day 10: Final Project and Course Wrap-up

10.1. Applying learned concepts to a real-world financial project

10.2. Collaborative project development: design, implementation, and presentation

10.3. Best practices for maintaining and improving Excel financial applications

10.4. Course summary and key takeaways

10.5. Q&A and closing remarks

© 2026 Faysal Aziz · Kuala Lumpur