The Definitive Guide To Dax Business Intelligence With Microsoft Excel Sql Server Analysis Services And Power Bi 2nd Edition Business Skills

Design, create and manage robust Power BI solutions to gain meaningful business insights Key Features Master all the dashboarding and reporting features of Microsoft Power BI Combine data from multiple sources, create stunning visualizations and publish your reports across multiple platforms A comprehensive guide with real-world use cases and examples demonstrating how you can get the best out of Microsoft Power BI Book Description This book is intended for business intelligence professionals responsible for the design and development of Power BI content as well as managers, architects and administrators who oversee Power BI projects and deployments. The chapters flow from the planning of a Power BI project through the development and distribution of content to the administration of Power BI for an organization. BI developers will learn how to create sustainable and impactful Power BI datasets, reports, and dashboards. This includes connecting to data sources, shaping and enhancing source data, and developing an analytical data model. Additionally, top report and dashboard design practices are described using features such as Bookmarks and the Power KPI visual. BI managers will learn how Power BI's tools work together such as with the On-premises data gateway and how content can be staged and securely distributed via Apps. Additionally, both the Power BI Report Server and Power BI Premium are reviewed. By the end of this book, you will be confident in creating effective charts, tables, reports or dashboards for any kind of data using the tools and techniques in Microsoft PowerBI. What you will learn Build efficient data retrieval and transformation processes with the Power Query M Language Design scalable, user-friendly DirectQuery and Import Data Models Develop visually rich, immersive, and interactive reports and dashboards Maintain version control and stage deployments across development, test, and production environments Manage and monitor the Power BI Service and the On-premises data gateway Develop a fully on-premise solution with the Power BI Report Server Scale up a Power BI solution via Power BI Premium capacity and migration to Azure Analysis Services or SQL Server Analysis Services Who this book is for Business Intelligence professionals and existing Power BI users looking to master Power BI for all their data visualization and dashboarding needs will find this book to be useful. While understanding of the basic BI concepts is required, some exposure to Microsoft Power BI will be helpful.

Power Query is one component of the Power BI (Business Intelligence) product from Microsoft, and "M" is the name of the programming language created by it. As more business intelligence pros begin using Power Pivot, they find that they do not have the Excel skills to clean the data in Excel; Power Query solves this problem. This book shows how to use the Power Query tool to get difficult data sets into both Excel and Power Pivot, and is solely devoted to Power Query dashboarding and reporting.

Any data analytics solution requires data population and preparation. With the rise of data analytics solutions these years, the need for this data preparation becomes even more essential. Power BI is a helpful data analytics tool that is used worldwide by many users. As a Power BI (or Microsoft BI) developer, it is essential to learn how to prepare the data in the right shape and format needed. You need to learn how to clean the data and build it in a structure that can be modeled easily and used high performant for visualization. Data preparation and transformation is the backend work. If you consider building a BI system as going to a restaurant and ordering food. The visualization is the food you see on the table nicely presented. The quality, the taste, and everything else come from the hard work in the kitchen. The part that you don't see or the backend in the world of Power BI is Power Query. You may already be familiar with other data preparation and transformation technologies, such as T-SQL, SSIS, Azure Data Factory, Informatica, etc. Power Query is a data transformation engine capable of preparing the data in the format you need. The good news is that to learn Power Query; you don't need to know programming. Power Query is for citizen data engineers. However, this doesn't mean that Power Query is not capable of performing advanced transformation. Power Query exists in many Microsoft tools and services such as Power BI, Excel, Dataflows, Power Automate, Azure Data Factory, etc. Through the years, this engine became more powerful. These days, we can say this is essential learning for anyone who wants to do data analysis with Microsoft technology to learn Power Query and master it. We have been working with Power Query since the very early release of that in 2013, named Data Explorer, and wrote blog articles and published videos about it. The number of articles we published under this subject easily exceeds hundreds. Through those articles, some of the fundamentals and key learnings of Power Query are explained. We thought it is good to compile some of them in a book series. A good analytics solution combines a good data model, good data preparation, and good analytics and calculations. Reza has written another book about the Basics of modeling in Power BI and a book on Power BI DAX Simplified. This book is covering the data preparation and transformations aspects of it. This book series is for you if you are building a Power BI solution. Even if you are just visualizing the data, preparation and transformations are an essential part of analytics. You do need to have the cleaned and prepared data ready before visualizing it. This book is compiled into a series of two books, which will be followed by a third book later; Getting started with Power Query in Power BI and Excel (already available to be purchased separately) Mastering Power Query in Power BI and Excel (This book) Power Query dataflows (will be published later) This book deeps dive into real-world challenges of data transformation. It starts with combining data sources and continues with aggregations and fuzzy operations. The book covers advanced usage of Power Query in scenarios such as error handling and exception reports, custom functions and parameters, advanced analytics, and some helpful table and list functions. The book continues with some performance tuning tips and it also explains the Power Query formula language (M) and the structure of it and how to use it in practical solutions. Although this book is written for Power BI and all the examples are presented using the Power BI. However, the examples can be easily applied to Excel, Dataflows, and other tools and services using Power Query.

Outside of the world of enterprise computing, there is one database that enables a huge range of software and hardware to flex relational database capabilities, without the baggage and cost of traditional database management systems. That database is SQLite—an embeddable database with an amazingly small footprint, yet able to handle databases of enormous size. SQLite comes equipped with an array of powerful features available through a host of programming and development environments. It is supported by languages such as C, Java, Perl, PHP, Python, Ruby, TCL, and more. The Definitive Guide to SQLite, Second Edition is devoted to complete coverage of the latest version of this powerful database. It offers a thorough overview of SQLite's capabilities and APIs. The book also uses SQLite as the basis for helping newcomers make their first foray into database development. In only a short time you can be writing programs as diverse as a server-side browser plug-in or the next great iPhone or Android application! Learn about SQLite extensions for C, Java, Perl, PHP, Python, Ruby, and Tcl. Get solid coverage of SQLite internals. Explore developing iOS (iPhone) and Android applications with SQLite. SQLite is the solution chosen for thousands of products around the world, from mobile phones and GPS devices to set-top boxes and web browsers. You almost certainly use SQLite every day without even realizing it!

Mastering Power BI

Getting, transforming, and preparing the data. The first step towards data analysis

Microsoft Excel Pivot Table Data Crunching (Office 2021 and Microsoft 365)

Applied DAX with Power BI: From Zero to Hero with 15-minute Lessons

Dax Patterns 2015

Business intelligence for Microsoft Power BI, SQL Server Analysis Services, and Excel

Over 120 recipes to enhance your business with analytics, reporting, and business intelligence

Your hands-on guide to building effective Power BI dashboards Expand your expertise–and teach yourself how to create world-class Power BI business analysis dashboards that bring data to life for better decision-making. If you're an experienced business intelligence professional or manager, you'll get all the guidance, examples, and code you need to succeed–even if you've never used Power BI before. Successfully design, architect, and implement Power BI in your organization Take full advantage of any Microsoft Power BI platform, including Power BI Premium Make upfront decisions that position your Power BI project for success Build rich, live dashboards to monitor crucial data from across your organization Aggregate data and data elements from numerous internal and external data sources Develop dynamic visualizations, including charts, maps, and graphs Bring data to life with stunning interactive reports Ensure dashboard security and compliance Drive user adoption through effective training

Learn the intricate workings of DAX and the mechanics that are necessary to solve advanced Power BI challenges. This book is all about DAX (Data Analysis Expressions), the formula language used in Power BI—Microsoft's leading self-service business intelligence application—and covers other products such as PowerPivot and SQL Server Analysis Services Tabular. You will learn how to leverage the advanced applications of DAX to solve complex tasks. Often a task seems complex due to a lack of understanding, or a misunderstanding of core principles, and how certain components interact with each other. The authors of this book use solutions and examples to teach you how to solve complex problems. They explain the intricate workings of important concepts such as Filter Context and Context Transition. You will learn how Power BI, through combining DAX building blocks (such as measures, table filtering, and data lineage), can yield extraordinary analytical power. Throughout these building blocks are used to create and compose solutions for advanced DAX problems, so you can independently build solutions to your own complex problems, and gain valuable insight from your data. What You Will Learn Understand the intricate workings of DAX to solve advanced problems Deconstruct problems into manageable parts in order to create your own recipes Apply predefined solutions for addressing problems, and link back step-by-step to the mechanics of DAX, to know the foundation of this powerful query language Get fully on board with DAX, a new and evolving language, by learning best practices Who This Book Is For Anyone who wants to use Power BI to build advanced and complex models. Some experience writing DAX is helpful, but not essential if you have experience with other data query languages such as MDX or SQL.

Solve real-world business problems by learning how to create common industry key performance indicators and other calculations using DAX within Microsoft products such as Power BI, SQL Server, and Excel. Key Features Learn to write sophisticated DAX queries to solve business intelligence and data analytics challenges Handle performance issues and optimization within the data model, DAX calculations and more Solve business issues with Microsoft Excel, Power BI, and SQL Server using DAX queries Book Description DAX provides an extra edge by extracting key information from the data that is already present in your model. Filled with examples of practical, real-world calculations geared toward business metrics and key performance indicators, this cookbook features solutions that you can apply for your own business analysis needs. You'll learn to write various DAX expressions and functions to understand how DAX queries work. The book also covers sections on dates, time, and duration to help you deal with working days, time zones, and shifts. You'll then discover how to manipulate text and numbers to create dynamic titles and ranks, and deal with measure totals. Later, you'll explore common business metrics for finance, customers, employees, and projects. The book will also show you how to implement common industry metrics such as days of supply, mean time between failure, order cycle time and overall equipment effectiveness. In the concluding chapters, you'll learn to apply statistical formulas for covariance, kurtosis, and skewness. Finally, you'll explore advanced DAX patterns for interpolation, inverse aggregators, inverse slicers, and even forecasting with a deseasonalized correlation coefficient. By the end of this book, you'll have the skills you need to use DAX's functionality and flexibility in business intelligence and data analytics. What you will learn Understand how to create common calculations for dates, time, and duration Create key performance indicators (KPIs) and other business calculations Develop general DAX calculations that deal with text and numbers Discover new ideas and time-saving techniques for better calculations and models Perform advanced DAX calculations for solving statistical measures and other mathematical formulas Handle errors in DAX and learn how to debug DAX calculations Understand how to optimize your data models Who this book is for Business users, BI developers, data analysts, and SQL users who are looking for solutions to the challenges faced while solving analytical operations using DAX techniques and patterns will find this book useful. Basic knowledge of the DAX language and Microsoft services is mandatory.

Build agile and responsive business intelligence solutions Create a semantic model and analyze data using the tabular model in SQL Server 2016 Analysis Services to create corporate-level business intelligence (BI) solutions. Led by two BI experts, you will learn how to build, deploy, and query a tabular model by following detailed examples and best practices. This hands-on book shows you how to use the tabular model's in-memory database to perform rapid analytics—whether you are new to Analysis Services or already familiar with its multidimensional model. Discover how to: • Determine when a tabular or multidimensional model is right for your project • Build a tabular model using SQL Server Data Tools in Microsoft Visual Studio 2015 • Integrate data from multiple sources into a single, coherent view of company information • Choose a data-modeling technique that meets your organization's performance and usability requirements • Implement security by establishing administrative and data user roles • Define and implement partitioning strategies to reduce processing time • Use Tabular Model Scripting Language (TMSL) to execute and automate administrative tasks • Optimize your data model to reduce the memory footprint for VertiPaq • Choose between in-memory (VertiPaq) and pass-through (DirectQuery) engines for tabular models • Select the proper hardware and virtualization configurations • Deploy and manipulate tabular models from C# and PowerShell using AMO and TOM libraries Get code samples, including complete apps, at: https://aka.ms/tabular/downloads About This Book • For BI professionals who are new to SQL Server 2016 Analysis Services or already familiar with previous versions of the product, and who want the best reference for creating and maintaining tabular models. • Assumes basic familiarity with database design and business analytics concepts.

Tabular Modeling in Microsoft SQL Server Analysis Services

Give Your Data Meaning

Analyzing Data with Power BI and Power Pivot for Excel

A Guide to the M Language in Excel Power Query

Expert Data Modeling with Power BI

Dax Formulas for Powerpivot

Excel Power Pivot and Power Query For Dummies

This is the eBook of the printed book and may not include any media, website access codes, or print supplements that may come packaged with the bound book. Introducing Microsoft Power BI enables you to evaluate when and how to use Power BI. Get inspired to improve business processes in your company by leveraging the available analytical and collaborative features of this environment. Be sure to watch for the publication of Alberto Ferrari and Marco Russo's upcoming retail book, Analyzing Data with Power BI and Power Pivot for Excel (ISBN 9781509302765). Go to the book's page at the Microsoft Press Store here for more details:http://aka.ms/analyzingdata/details. Learn more about Power BI at https://powerbi.microsoft.com/.

An easy-to-follow guide full of hands on examples of real-world Analysis Services cube development tasks. Each topic is explained and placed in context, and for the more inquisitive reader, there also more in-depth details of the concepts used. If you are an Analysis Services cube designer wishing to learn more advanced topic and best practices for cube design, this book is for you. You are expected to have some prior experience with Analysis Services cube development.

A pattern is a general reusable solution to a commonly occurring problem. This book is a collection of ready-to-use data models and formulas in DAX, that you can use in Power Pivot for Excel and in Microsoft Analysis Services Tabular. Create your data model faster by using a DAX pattern!

This comprehensive and authoritative guide will teach you the DAX language for business intelligence, data modeling, and analytics. Leading Microsoft BI consultants Marco Russo and Alberto Ferrari help you master everything from table functions through advanced code and model optimization. You'll learn exactly what happens under the hood when you run a DAX expression, how DAX behaves differently from other languages, and how to use this knowledge to write fast, robust code. If you want to leverage all of DAX's remarkable power and flexibility, this no-compromise "deep dive" is exactly what you need. Perform powerful data analysis with DAX for Microsoft SQL Server Analysis Services, Excel, and Power BI Master core DAX concepts, including calculated columns, measures, and error handling Understand evaluation contexts and the CALCULATE and CALCULATETABLE functions Perform time-based calculations: YTD, MTD, previous year, working days, and more Work with expanded tables, complex functions, and elaborate DAX expressions Perform calculations over hierarchies, including parent/child hierarchies Use DAX to express diverse and unusual relationships Measure DAX query performance with SQL Server Profiler and DAX Studio

Beginning DAX with Power BI

Build Business Intelligence Applications Powered with DAX Calculations, Insightful Visualizations, Advanced BI Techniques, and Loads of Data Sources (English Edition)

Learning real-world Power Query and M Techniques for a better data analysis

Business Intelligence with PowerPivot and SQL Server Analysis Services Tabular

Use effective and powerful queries in Power BI Desktop and Dataflows to prepare and transform your data

The Definitive Guide

Business intelligence with Microsoft Excel, SQL Server Analysis Services, and Power BI

Analyze tabular data using the BI Semantic Model (BISM) in SQL Server 2012 Analysis Services--and discover a simpler method for creating corporate-level BI solutions. Led by three BI experts, you'll learn how to build, deploy, and query a BISM tabular model with step-by-step guides, examples, adn best practices. This hands-on book shows you how the tabular model's in-memory database enables you to perform rapid analytics--whether you're a professional BI developer new to Analysis Services or already familiar with its multidimensional model.

Renowned DAX experts Alberto Ferrari and Marco Russo teach you how to design data models for maximum efficiency and effectiveness. How can you use Excel and Power BI to gain real insights into your information? As you examine your data, how do you write a formula that provides the numbers you need? The answers to both of these questions lie with the data model. This book introduces the basic techniques for shaping data models in Excel and Power BI. It's meant for readers who are new to data modeling as well as for experienced data modelers looking for tips from the experts. If you want to use Power BI or Excel to analyze data, the many real-world examples in this book will help you look at your reports in a different way–like experienced data modelers do. As you'll soon see, with the right data model, the correct answer is always a simple one! By reading this book, you will: • Gain an understanding of the basics of data modeling, including tables, relationships, and keys • Familiarize yourself with star schemas, snowflakes, and common modeling techniques • Learn the importance of granularity • Discover how to use multiple fact tables, like sales and purchases, in a complex data model • Manage calendar-related calculations by using date tables • Track historical attributes, like previous addresses of customers or manager assignments • Use snapshots to compute quantity on hand • Work with multiple currencies in the most efficient way • Analyze events that have durations, including overlapping durations • Learn what data model you need to answer your specific business questions About This Book • For Excel and Power BI users who want to exploit the full power of their favorite tools • For BI professionals seeking new ideas for modeling data

Learn how to use Excel pivot tables and pivot charts to produce powerful, dynamic reports in minutes instead of hours, to take control of your data and your business. Even if you've never created a pivot table before, this book will help you leverage all their remarkable flexibility and

analytical power--including valuable improvements in Excel and in Office 365. Drawing on more than 45 combined years of Excel experience, Bill Jelen and Michael Alexander offer practical recipes for solving real business problems, help you avoid common mistakes, and present tips and tricks you'll find nowhere else.

A guide to PowerPivot and Power Query no data cruncher should be without! Want to familiarize yourself with the rich set of Microsoft Excel tools and reporting capabilities available from PowerPivot and Power Query? Look no further! Excel PowerPivot & Power Query For Dummies shows you how this powerful new set of tools can be leveraged to more effectively source and incorporate 'big data' Business Intelligence and Dashboard reports. You'll discover how PowerPivot and Power Query not only allow you to save time and simplify your processes, but also enable you to substantially enhance your data analysis and reporting capabilities. Gone are the days of relatively small amounts of data—today's data environment demands more from business analysts than ever before. Now, with the help of this friendly, hands-on guide, you'll learn to use PowerPivot and Power Query to expand your skill-set from the one-dimensional spreadsheet to new territories, like relational databases, data integration, and multi-dimensional reporting. Demonstrates how Power Query is used to discover, connect to, and import your data Shows you how to use PowerPivot to model data once it's been imported Offers guidance on using these tools to make analyzing data easier Written by a Microsoft MVP in the lighthearted, fun style you've come to expect from the For Dummies brand If you spend your days analyzing data, Excel PowerPivot & Power Query For Dummies will get you up and running with the rich set of Excel tools and reporting capabilities that will make your life—and work—easier.

Microsoft Power BI Complete Reference
The Definitive Guide to DAX
Mastering Microsoft Power BI
Power Query Cookbook
Building Data Models with PowerPivot
Microsoft SQL Server 2012 Analysis Services
The Definitive Guide to SQLite

Leverage your source data from hundreds of different connections, perform millions of different transformations, and easily manage highly complex data lifecycles with Power Query Key FeaturesCollect, combine, and transform data using Power Query's data connectivity and data preparation featuresOvercome the problems faced while accessing data from multiple sources and reshape it to meet your business requirementsExplore how the M language can be used to write your own customized solutionsBook Description Power Query is a data preparation tool that enables data engineers and business users to connect, reshape, enrich, and transform their data to facilitate relevant business insights and analysis. With Power Query's wide range of features, you can perform no-code transformations and complex M code functions at the same time to get the most out of your data. This Power Query book will help you to connect to data sources, achieve intuitive transformations, and get to grips with preparation practices. Starting with a general overview of Power Query and what it can do, the book advances to cover more complex topics such as M code and performance optimization. You'll learn how to extend these capabilities by gradually stepping away from the Power Query GUI and into the M programming language. Additionally, the book also shows you how to use Power Query Online within Power BI Dataflows. By the end of the book, you'll be able to leverage your source data, understand your data better, and enrich it with a full stack of no-code and custom features that you'll learn to design by yourself for your business requirements. What you will learnUnderstand how to use Power Query to connect and explore dataExplore ways to reshape and enrich dataDiscover the potential of Power Query across the Microsoft platformBuild complex and custom transformationsUse M code to write new queries against data sourcesUse the Power Query Online tool within Power BI DataflowsImplement best practices such as reusing dataflows, optimizing expanding table operations, and field mappingWho this book is for This book is for data analysts, BI developers, data engineers, and anyone looking for a desk reference guide to learn how Power Query can be used with different Microsoft products to handle data of varying complexity. Beginner-level knowledge of Power BI and the M Language will help you to get the best out of this book.

An accessible fast paced introduction to all aspects of Power BI for new or aspiring BI professionals, data analysts, and data visualizers Key FeaturesUpdated with the latest features in Power BI including Dataflow, AI insights, visuals and row level securityGet faster and more intuitive data insights using Microsoft Power BI and its business intelligence capabilitiesBuild accurate analytical models, reports, and dashboardsBook Description This revised edition has been fully updated to reflect the latest enhancements to Power BI. It includes a new chapter dedicated to dataflow, and covers all the essential concepts such as installation, designing effective data models, as well as building basic dashboards and visualizations to help you and your organization make better business decisions. You'll learn how to obtain data from a variety of sources and clean it using Power BI Query Editor. You'll then find out how you can design your data model to navigate and explore relationships within it and build DAX formulas to make your data easier to work with. Visualizing your data is a key element in this book, and you'll get to grips rapidly with data visualization styles and enhanced digital storytelling techniques. In addition, you will acquire the skills to build your own dataflows, understand the Common Data Model, and automate data flow refreshes to eradicate data cleansing inefficiency. This guide will help you understand how to administer your organization's Power BI environment so that deployment can be made seamless, data refreshes can run properly, and security can be fully implemented. By the end of this Power BI book, you'll have a better understanding of how to get the most out of Power BI to perform effective business intelligence. What you will learnConnect to data sources using import and DirectQuery optionsUse Query Editor for data transformation and data cleansing processes, including writing M and R scripts and dataflows to do the same in the cloudDesign optimized data models by designing relationships and DAX calculationsDesign effective reports with built-in and custom visualsAdopt Power BI Desktop and Service to implement row-level securityAdminister a Power BI cloud tenant for your organizationUse built-in AI capabilities to enhance Power BI data transformation techniquesDeploy your Power BI desktop files into the Power BI Report ServerWho this book is for Aspiring business intelligence professionals who want to learn Power BI will find this book useful. If you have a basic understanding of BI concepts and want to learn how to apply them using Microsoft Power BI, this book is for you.

Publisher's Note: Products purchased from Third Party sellers are not guaranteed by the publisher for quality, authenticity, or access to any online entitlements included with the product. Explore, create, and manage highly interactive data visualizations using Microsoft Power BI Extract meaningful business insights from your disparate enterprise data using the detailed information contained in this practical guide. Written by a recognized BI expert and bestselling author, Data Analysis with Microsoft Power BI teaches you the skills you need to interact with, author, and maintain robust visualizations and custom data models. Hands-on exercises based on real-life business scenarios clearly demonstrate each technique. Publishing your results to the Power BI Service (PowerBI.com) and Power BI Report Server are also fully covered. Inside, you will discover how to: •Understand Business Intelligence and self-service analytics •Explore the tools and features of Microsoft Power BI •Create and format effective data visualizations •Incorporate advanced interactivity and custom graphics •Build and populate accurate data models •Transform data using the Power BI Query Editor •Work with measures, calculated columns, and tabular models •Write powerful DAX language scripts •Share content on the PowerBI Service (PowerBI.com) •Store your visualizations on the Power BI Report Server

A guide to the development aspects of Excel covers such topics as building add-ins, creating custom charts, using class modules, handling errors, controlling external applications, and programming with databases.
The Definitive Guide to Developing Applications Using Microsoft Excel, VBA, and .NET
M Is for (Data) Monkey
The Excel Pro's Guide to Mastering Dax
Business Intelligence with Microsoft Excel, SQL Server Analysis Services, and Power BI
Professional Excel Development
Microsoft PowerPivot for Excel 2010
Bring your data to life through data modeling, visualization, and more

Power BI is a powerful self-service (and enterprise) business intelligence (BI) tool that was first made generally available by Microsoft in July 2015. Power BI is a complete BI package that covers the end to end BI process including data acquisition (get data), data modelling (prepare/model the data) and data visualisation (analyse the data). And there is a lot of good news about this tool including the fact that the skills needed to succeed with Power BI are fully transferable to Microsoft Excel. There are 3 learning areas required to master everything Power BI Desktop has to offer.1. The M Language - used for data acquisition2. The DAX Language - used to prepare and model data3. Visualisation and analysis - used to present data in a compelling wayPower BI is probably the first commercial grade software product that brings all of these areas into a single software package that is completely accessible to a business user (you don't need to be an IT pro). This book focuses on number 2 above, the DAX language (Data Analysis Expressions). Super Charge Power BI Desktop is the second book written by Matt Allington and is a sister book to his first book Learn to Write DAX (first released Dec 2015). Super Charge Power BI Desktop uses the same learning and practice exercise framework as used in Learn to Write DAX however the entire book is written using the Power BI Desktop user interface. Unfortunately simply reading a book is normally not enough for Excel users wanting to get the most out of Power BI Desktop and to learn the DAX language - most people will also need some practice. Super Charge Power BI Desktop is different to other books - it is written in such a way to clearly explain the concepts of Power BI data modelling while at the same time giving hands-on practice to deeply engage the reader to help the new knowledge and concepts stick. The book first presents the theory, then provides worked through sample exercises demonstrating each of the concepts, and finally it provides the reader with practice exercises and answers to maximize learning retention.

Written by a Microsoft MVP, this book teaches you the practical skills to take the most of DAX from whatever angle you'd like to approach it. It's written for data analysts using Power BI or Power Pivot, BI developers targeting Analysis Services Tabular, and in general anyone who's interested in DAX. You'll learn DAX methodically with self-paced lessons that build upon your previous knowledge to understand progressively more challenging concepts. Each lesson starts with providing the necessary theoretical background, followed by step-by-step exercises. Most lessons are five to six pages long, and it should take you no more than 15 minutes to complete the practices. Do one lesson per day and become a DAX expert in a month! The book page at https: //prologika.com/daxbook provides sample chapters, source code, and a discussion forum where the author welcomes your feedback and questions. WHAT'S INSIDE: CALCULATED COLUMNS Create custom columns Navigate relationships Assemble dashboards with a few clicks Aggregate and rank data Implement grups and bins Create calculated tables MEASURES Implicit and explicit measures Work with user selection Create variables Overwrite filter context Group data Apply time intelligence QUERIES Create and test DAX queries Implement query measures Analyze query performance Implement paginated reports ADVANCED TOPICS Recursive relationships Many-to-many relationships Virtual relationships Different join types Data security patterns and much more ...

Any data analytics solution requires data population and preparation. With the rise of data analytics solutions these years, the need for this data preparation becomes even more essential. Power BI is a helpful data analytics tool that is used worldwide by many users. As a Power BI (or Microsoft BI) developer, it is essential to learn how to prepare the data in the right shape and format needed. You need to learn how to clean the data and build it in the structure that can be modeled easily and used high performant for visualization. Data preparation and transformation is the backend work. If you consider building a BI system as going to a restaurant and ordering food. The visualization is the food you see on the table nicely presented. The quality, the taste, and everything else comes from the hard work in the kitchen. The part that you don't see or the backend in the world of Power BI is Power Query. You may be already familiar with some other data preparation and data transformation technologies, such as T-SQL, SSIS, Azure Data Factory, Informatica, etc. Power Query is a data transformation engine capable of preparing the data in the format you need. The good news is that to learn Power Query; you don't need to know programming. Power Query is for citizen data engineers. However, this doesn't mean that Power Query is not capable of performing advanced transformation. Unfortunately, because Power Query and data preparation is the kitchen work of the BI system, many Power BI users skip the learning of it and become aware of it somewhere along their BI project. Once they get familiar with it, they realize there are tons of things they could have implemented easier, faster, and in a much more maintainable way using Power Query. In other words, they learn mastering Power Query is the key skill toward mastering Power BI. We have been working with Power Query since the very early release of that in 2013, named Data Explorer, and wrote blog articles and published videos about it. The number of articles we published under this subject easily exceeds hundreds. Through those articles, some of the fundamentals and key learnings of Power Query are explained. We thought it is good to compile some of them in a book. A good analytics solution combines a good data model, good data preparation, and good analytics and calculations. Reza has written another book about the Basics of modeling in Power BI and a book on DAX Simplified. This book is covering the data preparation and transformations aspects of it. This book is for you if you are building a Power BI solution. Even if you are just visualizing the data, preparation and transformations are an essential part of analytics. You do need to have the cleaned and prepared data ready before visualizing it. This book is complied into a series of two books, which will be followed by a third book later; Getting started with Power Query in Power BI and Excel (this book) Mastering Power Query in Power BI and Excel (already available to be purchased separately) Power Query dataflows (will be published later) Although this book is written for Power BI and all the examples are presented using the Power BI. However, the examples can be easily applied to Excel, Dataflows, and other tools and services using Power Query.

Microsoft PowerPivot is a free add-on to Excel from Microsoft that allows users to produce new kinds of reports and analyses that were simply impossible before, and this book is the first to tackle DAX formulas, the core capability of PowerPivot, from the perspective of the Excel audience. Written by the world's foremost PowerPivot blogger and practitioner, the book's concepts and approach are introduced in a simple, step-by-step manner tailored to the learning style of Excel users everywhere. The techniques presented allow users to produce, in hours or even minutes, results that formerly would have taken entire teams weeks or months to produce. It includes lessons on the difference between calculated columns and measures; how formulas can be reused across reports of completely different shapes; how to merge disjointed sets of data into unified reports; how to make certain columns in a pivot behave as if the pivot were filtered while other columns do not; and how to create time-intelligent calculations in pivot tables such as "Year over Year" and "Moving Averages" whether they use a standard, fiscal, or a complete custom calendar. The "pattern-like" techniques and best practices contained in this book have been developed and refined over two years of onsite training with Excel users around the world, and the key lessons from those seminars costing thousands of dollars per day are now available to within the pages of this easy-to-follow guide. This updated second edition covers new features introduced with Office 2015.

Power BI Is Better When You Learn to Write DAX
Collect, Combine, and Transform Data Using Power Query in Excel and Power BI
Introducing Microsoft Power BI
Data Analysis with Microsoft Power BI
Get the best out of Power BI by building optimized data models for reporting and business needs
Discover the intricacies of this powerful query language to gain valuable insights from your data
Power Query for Power BI and Excel

Now expanded and updated with modern best practices, this is the most complete guide to Microsoft's DAX language for business intelligence, data modeling, and analytics. Expert Microsoft BI consultants Marco Russo and Alberto Ferrari help you master everything from table functions through advanced code and model optimization. You'll learn exactly what happens under the hood when you run a DAX expression, and use this knowledge to write fast, robust code. This edition focuses on examples you can build and run with the free Power BI Desktop, and helps you make the most of the powerful syntax of variables (VAR) in Power BI, Excel, or Analysis Services. Want to leverage all of DAX's remarkable capabilities? This no-compromise "deep dive" is exactly what you need. Perform powerful data analysis with DAX for Power BI, SQL Server, and Excel · Master core DAX concepts, including calculated columns, measures, and calculation groups · Work efficiently with basic and advanced table functions · Understand evaluation contexts and the CALCULATE and CALCULATETABLE functions · Perform time-based calculations · Use calculation groups and calculation items · Use syntax of variables (VAR) to write more readable, maintainable code · Express diverse and unusual relationships with DAX, including many-to-many relationships and bidirectional filters · Master advanced optimization techniques, and improve performance in aggregations · Optimize data models to achieve better compression · Measure DAX query performance with DAX Studio and learn how to optimize your DAX

Bring your data to life with Power BI Key Features Get to grips with the fundamentals of Microsoft Power BI and its Business Intelligence capabilities Build accurate analytical models, reports and dashboards Get faster and more intuitive insights from your data using Microsoft Power BI Book Description Microsoft Power BI is a cloud-based service that helps you easily visualize and share insights using your organization's data. This book will get you started with business intelligence using the Power BI toolset, covering essential concepts such as installation,designing effective data models, as well as building basic dashboards and visualizations to make your data come to life You will learn how to get your data the way you want – connecting to data sources and how to clean your data with the Power BI Query Editor. You will next learn how to properly design your data model to make your data come to work with. You will next learn how to properly design your data model to navigate table relationships and build DAX formulas to make your data easier to work with. Visualizing your data is another key element of this book, and you will learn how to follow proper data visualization styles and enhanced digital storytelling techniques. By the end of this book, you will understand how to administer your organization's Power BI environment so deployment can be made seamless, data refreshes can run properly, and security can be fully implemented What you will learn Connect to data sources using both import and DirectQuery options Use the Query Editor to apply data transformations and data cleansing processes, including learning how to write M and R scripts Design optimized data models by designing relationships and DAX calculations Design effective reports with both in-built and custom visuals to design effective reports Use the Power BI Desktop and Power BI Service to implement Row Level Security on your model Administer a Power BI cloud tenant for your organization Deploy your Power BI Desktop files into the Power BI Report Server Who this book is for This book is for aspiring Business Intelligence professionals who want to get up and running with Microsoft Power BI. If you have a basic understanding of BI concepts and want to learn how to apply them using Microsoft Power BI, this book is for you.

A revised and updated edition offers comprehensive coverage of ECMAScript 5 (the new JavaScript language standard) and also the new APIs introduced in HTML5, with chapters on functions and classes completely rewritten and updated to match current best practices and a new chapter on language extensions and subsets. Original.

Design, develop, and master efficient Power BI solutions for impactful business insights Key Features Get to grips with the fundamentals of Microsoft Power BI Combine data from multiple sources, create visuals, and publish reports across platforms Understand Power BI concepts with real-world use cases Book Description Microsoft Power BI Complete Reference Guide gets you started with business intelligence by showing you how to install the Power BI toolset, design effective data models, and build basic dashboards and visualizations that make your data come to life. In this Learning Path, you will learn to create powerful interactive reports by visualizing your data and learn visualization styles, tips and tricks to bring your data to life. You will be able to administer your organization's Power BI environment to create and share dashboards. You will also be able to streamline deployment by implementing security and regular data refreshes. Next, you will delve deeper into the nuances of Power BI and handling projects. You will get acquainted with planning a Power BI project, development, and distribution of content, and deployment. You will learn to connect and extract data from various sources to create robust datasets, reports, and dashboards. Additionally, you will learn how to format reports using visuals, animation and analytics to further refine your data. By the end of this Learning Path, you will be able to implement the various Power BI tools such as on-premises gateway together along with staging and securely distributing content via apps. This Learning Path includes content from the following Packt products: Microsoft Power BI Quick Start Guide by Devin Knight et al. Mastering Microsoft Power BI by Brett PowellWhat you will learnConnect to data sources using both import and DirectQuery optionsLeverage built-in and custom visuals to design effective reportsAdminister a Power BI cloud tenant for your organizationDeploy your Power BI Desktop files into the Power BI Report ServerBuild efficient data retrieval and transformation processesWho this book is for Microsoft Power BI Complete Reference Guide is for those who want to learn and use the Power BI features to extract maximum information and make intelligent decisions that boost their business. If you have a basic understanding of BI concepts and want to learn how to apply them using Microsoft Power BI, then Learning Path is for you. It consists of real-world examples on Power BI and goes deep into the technical issues, covers additional protocols, and much more.

Build dashboards and visualizations to make your data come to life
DAX Cookbook
Business Intelligence with Microsoft Power BI, SQL Server Analysis Services, and Excel
The SQL Pro's Guide to Better Business Intelligence

The BISM Tabular Model
T-SQL Window Functions
DAX Patterns: Second Edition

Manage and work with business data effectively by learning data modeling techniques and leveraging the latest features of Power BI Key Features Understand data modeling techniques to get the best out of data using Power BI Define the relationships between data to extract valuable insights Solve a wide variety of business challenges by building optimal data models Book Description Microsoft Power BI is one of the most popular business intelligence tools available on the market for desktop and the cloud. This book will be your guide to understanding the ins and outs of data modeling and how to create data models using Power BI confidently. You'll learn how to connect data from multiple sources, understand data, define and manage relationships between data, and shape data models. In this book, you'll explore how to use data modeling and navigation techniques to define relationships and create a data model before defining new metrics and performing custom calculations using modeling features. As you advance through the chapters, the book will demonstrate how to create full-fledged data models, enabling you to create efficient data models and simpler DAX code with new data modeling features. With the help of examples, you'll discover how you can solve business challenges by building optimal data models and changing your existing data models to meet evolving business requirements. Finally, you'll learn how to use some new and advanced modeling features to enhance your data models to carry out a wide variety of complex tasks. By the end of this Power BI book, you'll have gained the skills you need to structure data coming from multiple sources in different ways to create optimized data models that support reporting and data analytics. What you will learn Implement virtual tables and time intelligence functionalities in DAX to build a powerful model Identify Dimension and Fact tables and implement them in Power Query Editor Deal with advanced data preparation scenarios while building Star Schema Explore best practices for data preparation and data modeling Discover different hierarchies and their common pitfalls Understand complex data models and how to decrease the level of model complexity with different data modeling approaches Who this book is for This MS Power BI book is for BI users, data analysts, and analysis developers who want to become well-versed with data modeling techniques to make the most of Power BI. Basic knowledge of Power BI and Star Schema will help you to understand the concepts covered in this book.

"Most T-SQL developers recognize the value of window functions for data analysis calculations. But they can do far more, and recent optimizations make them even more powerful. In T-SQL Window Functions, renowned T-SQL expert Itzik Ben-Gan introduces breakthrough techniques for using them to handle many common T-SQL querying tasks with unprecedented elegance and power. Using extensive code examples, he guides you through window aggregate, ranking, distribution, offset, and ordered set functions. You'll find a detailed section on optimization, plus an extensive collection of business solutions -- including novel techniques available in no other book."--provided by publisher.

Microsoft PowerPivot for Excel 2010: Give Your Data Meaning introduces PowerPivot in Excel 2010 to power users and data analysts who want to give their data meaning by creating their own Business Intelligence models. And with Microsoft Excel 2010: Data Analysis and Business Modeling, you'll learn the best ways to use Office Excel 2010 for data analysis and business modeling. Award-winning professor and statistician Wayne Winston shares practical examples to help you transform data into bottom-line results. Web site includes practice files. The two books included in this kit are: 9780735640580 Microsoft PowerPivot for Excel 2010 9780735643369 Microsoft Office Excel 2007: Data Analysis and Business Modeling, 3E

Expert Choice to build Business Intelligence landscapes and dashboards for Enterprises KEY FEATURES ● In-depth knowledge of Power BI, demonstrated through step-by-step exercises. ● Covers data modelling, visualization, and implementing security with complete hands-on training. ● Includes a project that simulates a realistic business environment from start to finish. DESCRIPTION Mastering Power BI covers the entire Power BI implementation process. The readers will be able to understand all the concepts covered in this book, from data modelling to creating powerful - visualizations. This book begins with the concepts and terminology such as Star-Schema, dimensions and facts. It explains about multi-table dataset and demonstrates how to load these tables into Power BI. It shows how to load stored data in various formats and create relationships. Readers will also learn more about Data Analysis Expressions (DAX). This book is a must for the developers wherein they learn how to extend the usability of Power BI, to explore meaningful and hidden data insights. Throughout the book, you keep on learning about the concepts, techniques and expert practices on loading and shaping data, visualization design and security implementation. WHAT YOU WILL LEARN ● Learn about Business Intelligence (BI) concepts and its contribution in business analytics. ● Learn to connect, load, and transform data from disparate data sources. ● Start creating and executing powerful DAX calculations. ● Design various visualizations to prepare insightful reports and dashboards. WHO THIS BOOK IS FOR This book is for anyone interested in learning how to use Power BI desktop or starting a career in Business Intelligence and Analytics. While this covers all the fundamentals, it is recommended that the reader be familiar with MS-Excel and database concepts. TABLE OF CONTENTS 1. Understanding the Basics 2. Connect and Shape 3. Optimize your datamodel 4. Data Analysis Expressions (DAX) 5. Visualizations in Power BI 6. Power BI Service 7. Securing your application

Expert techniques for effective data analytics and business intelligence

Hands-On Business Intelligence with DAX

Pro DAX with Power BI
Expert Cube Development with SSAS Multidimensional Models
Super Charge Power BI
Microsoft Excel 2013
The Definitive Guide to DAXBusiness intelligence with Microsoft Excel, SQL Server Analysis Services, and Power BIMicrosoft Press
Shows readers how to perform complex data analysis, create reports with the data analysis expressions language, and add hierarchies to data models to enable faster browsing.
Implement business intelligence (BI), data modeling, and data analytics within Microsoft products such as Power BI, SQL Server, and Excel Key Features Understand the ins and outs of DAX expressions and querying functions with the help of easy-to-follow examples Manipulate data of varying complexity and optimize BI workflows to extract key insights Create, monitor, and improve the performance of models by writing clean and robust DAX queries Book Description Data Analysis Expressions (DAX) is known for its ability to increase efficiency by extracting new information from data that is already present in your model. With this book, you'll learn to use DAX's functionality and flexibility in the BI and data analytics domains. You'll start by learning the basics of DAX, along with understanding the importance of good data models, and how to write efficient DAX formulas by using variables and formatting styles. You'll then explore how DAX queries work with the help of examples. The book will guide you through optimizing the BI workflow by writing powerful DAX queries. Next, you'll learn to manipulate and load data of varying complexity within Microsoft products such as Power BI, SQL Server, and Excel Power Pivot. You'll then discover how to build and extend your data models to gain additional insights, before covering progressive DAX syntax and functions to understand complex relationships in DAX. Later, you'll focus on important DAX functions, specifically those related to tables, date and time, filtering, and statistics. Finally, you'll delve into advanced topics such as how the formula and storage engines work to optimize queries. By the end of this book, you'll have gained hands-on experience in employing DAX to enhance your data models by extracting new information and gaining deeper insights. What you will learn Understand DAX, from the basics through to advanced topics, and learn to build effective data models Write and use DAX functions and expressions with the help of hands-on examples Discover how to handle errors in your DAX code, and avoid unwanted results Load data into a data model using Power BI, Excel Power Pivot, and SSAS Tabular Cover DAX functions such as date, time, and time intelligence using code examples Gain insights into data by using DAX to create new information Understand the DAX VertiPaq engine and how it can help you optimize data models Who this book is for This book is for data analysts, business analysts, BI developers, or SQL users who want to make the best use of DAX in the BI and data analytics domain with the help of examples. Some understanding of BI concepts is mandatory to fully understand the concepts covered in the book.
Attention all SQL Pros, DAX is not just for writing Excel-based formulas! Get hands-on learning and expert advice on how to use the vast capabilities of the DAX language to solve common data modeling challenges. Beginning DAX with Power BI teaches key concepts such as mapping techniques from SQL to DAX, filtering, grouping, joining, pivoting, and using temporary tables, all aimed at the SQL professional. Join author Philip Seamark as he guides you on a journey through typical business data transformation scenarios and challenges, and teaches you, step-by-step, how to resolve challenges using DAX. Tips, tricks, and shortcuts are included and explained, along with examples of the SQL equivalent, in order to accelerate learning. Examples in the book range from beginner to advanced, with plenty of detailed explanation when walking through each scenario. What You'll Learn Turbocharge your Power BI model by adding advanced DAX programming techniques Know when to use calculated measures versus calculated columns Generate new tables on the fly from existing data Optimize, monitor, and tune Power BI to improve performance of your models Discover new ideas, tricks, and time-saving techniques for better models Who This Book Is For Business intelligence developers, business analysts, or any SQL user who wants to use Power BI as a reporting tool. A solid understanding of SQL is recommended, as examples throughout the book include the DAX equivalents to SQL problem/solution scenarios.
Bring your data to life with the powerful features of Microsoft Power BI
Getting started with Power Query in Power BI and Excel
JavaScript
Mastering Power Query in Power BI and Excel
Microsoft Power BI Quick Start Guide
Microsoft Power BI Dashboards Step by Step
Power Query for Power BI and Excel is a book for people who are tired of copying and pasting data into Excel worksheets. Power Query, part of the Microsoft Power BI suite, is a tool that automates the process of getting data into Excel and will save you hours of dull, repetitive, and error-prone work! Power Query makes it easy to extract data from many different data sources, filter that data, aggregate it, clean it and perform calculations on it, finally loading that data into either your worksheet or directly into the new Excel 2013 Data Model used by Power Pivot. This concise, practical book provides a complete guide to Power Query and how to use it to solve all of your Excel data-loading problems. Power Query for Power BI and Excel goes well beyond the surface of what Power Query can do. The book goes deep into the underlying M language, showing you how to do amazing things that aren't going to be possible from just the GUI interface that is covered in most other books. You'll have full command of the GUI, and you'll be able to drop into the M language to go beyond what the GUI provides. The depth in this book makes it a must-have item for anyone who is pushing Power BI and Excel to their limits in the pursuit of business intelligence from data analysis. Teaches the basics of using Power Query to load data into Excel Helps you solve common, data-related problems with Power Query Shows how to write your own solutions in the powerful M language