NOTE: This title is also available as a free eBook on the Microsoft Download Center. It is offered for sale in print format as a convenience. Get a head start evaluating SQL Server 2014 - guided by two experts who have worked with the technology from the earliest beta. Based on Community Technology Preview 2 (CTP2) software, this guide introduces new features and capabilities, with practical insights on how SQL Server 2014 can meet the needs of your business. Get the early, high-level overview you need to begin preparing your deployment now. Coverage includes:

- **SQL Server 2014 Editions and engine enhancements**
- **Mission-critical performance enhancements**
- **Hybrid cloud enhancements**
- **Self-service Business Intelligence enhancements in Microsoft Excel**
- **Enterprise information management enhancements**
- **Big Data solutions**

This book is an introduction and deep-dive into the many uses of dynamic SQL in Microsoft SQL Server. Dynamic SQL is key to large-scale searching based upon user-entered criteria. It's also useful in generating value-lists, in dynamic pivoting of data for business intelligence reporting, and for customizing database objects and querying their structure. Executing dynamic SQL is at the heart of applications such as business intelligence dashboards that need to be fluid and respond instantly to changing user needs as those users explore their data and view the results. Yet dynamic SQL is feared by many due to concerns over SQL injection attacks. Reading Dynamic SQL: Applications, Performance, and Security is your opportunity to learn and master an often misunderstood feature, including security and SQL injection. All aspects of security relevant to dynamic SQL are discussed in this book. You will learn many ways to save time and develop code more efficiently, and you will practice directly with security scenarios that threaten companies around the world every day. Dynamic SQL: Applications, Performance, and Security helps you bring the productivity and user-satisfaction of flexible and responsive applications to your organization safely and securely. Your organization's increased ability to respond to rapidly changing business scenarios will build competitive advantage in an increasingly crowded and competitive global marketplace.

Discusses many applications of dynamic SQL, both simple and complex. Explains each example with demos that can be run at home and on your laptop. Helps you to identify when dynamic SQL can offer superior performance. Pays attention to security and best practices to ensure safety of your data.

What You Will Learn

- **Build flexible applications that respond fast to changing business needs.**
- **Take advantage of unconventional but productive uses of dynamic SQL.**
- **Protect your data from attack through best-practices in your implementations.**
- **Know about SQL Injection and be confident in your defenses against it**
- **Run at high performance by optimizing dynamic SQL in your applications.**

By mastering these applications of dynamic SQL, you can increase the value of your applications beyond the out-of-the-box applications that ship with SQL Server. Dynamic SQL: Applications, Performance, and Security shows you how to do just that.
Troubleshoot and debug dynamic SQL to ensure correct results. Who This Book is For Dynamic SQL: Applications, Performance, and Security is for developers and database administrators looking to hone and build their T-SQL coding skills. The book is ideal for advanced users wanting to plumb the depths of application flexibility and troubleshoot performance issues involving dynamic SQL. The book is also ideal for beginners wanting to learn what dynamic SQL is about and how it can help them deliver competitive advantage to their organizations.

This book will expand your ability to deliver meaningful, performant solutions to your organization. You'll learn how to use an analytical engine for decision making and business analytics. With the help of this practical guide, you'll also be able to work confidently with data and analytics.

Your guide to quickly turn data into results. Transform your skills, data, and business—and create your own BI solutions using software you already know and love: Microsoft Excel. Two business intelligence (BI) experts take you inside PowerPivot functionality for Excel 2013, with a focus on real world scenarios, problem-solving, and data modeling. You'll learn how to quickly turn mass quantities of data into meaningful information and on-the-job results—no programming required! Understand the differences between PowerPivot for Self Service BI and SQL Server Analysis Services for Corporate BI Extend your existing data-analysis skills to create your own BI solutions Quickly manipulate large data sets, often in millions of rows Perform simple-to-sophisticated calculations and what-if analysis Create complex reporting systems with data modeling and Data Analysis Expressions Share your results effortlessly across your organization using Microsoft SharePoint Authors' note on using Microsoft Excel 2016: This book's content was written against Excel 2013, but it is useful and valid for users of Excel 2016 too. Excel 2016 introduces several new DAX functions and an improved editor for DAX without changing any existing behavior. In other words, all of the concepts and examples explained in this book continue to work with Excel 2016.

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

Get the end-to-end instruction you need to design, develop, and deploy more effective data integration, reporting, and analysis solutions using SQL Server 2008—whether you're new to business intelligence (BI) programming or a seasoned pro. With real-world examples and insights from an expert team, you'll master the concepts, tools, and techniques for building solutions that deliver intelligence—and business value—exactly where users want it. Discover how to: Manage the development life cycle and build a BI team Dig into SQL Server Analysis Services, Integration Services, and Reporting Services Navigate the Business Intelligence Development Studio (BIDS) Write queries that rank, sort, and drill down on sales data Develop extract, transform, and load (ETL) solutions Add a source code control system Help secure packages for deployment via encryption and credentials Use MDX and DMX Query Designers to build reports based on OLAP cubes and data mining models Create and implement custom objects using .NET code View reports in Microsoft Office Excel and Office SharePoint Serverook

Expert tabular modeling techniques for building and deploying cutting-edge business analytical reporting solutions About This Book Build and deploy Tabular Model projects from relational data sources Leverage DAX and create high-performing calculated fields and measures Create ad-hoc reports based on a Tabular Model solution...
Useful tips to monitor and optimize your tabular solutions

Who This Book Is For
This book is for SQL BI professionals and Architects who want to exploit the full power of the new Tabular models in Analysis Services. Some knowledge of previous versions of Analysis services would be helpful but is not essential.

What You Will Learn
Learn all about Tabular services mode and how it speeds up development
Build solutions using sample datasets
Explore built-in actions and transitions in SSAS 2016
Implement row-column, and role-based security in a Tabular Data model
Realize the benefits of in-memory and DirectQuery deployment modes
Get up to date with the new features added to SQL Server 2016 Analysis Services
Optimize Data Models and Relationships

SQL Server Analysis Service (SSAS) has been widely used across multiple businesses to build smart online analytical reporting solutions. It includes two different types of modeling for analysis services: Tabular and Multi Dimensional. This book covers Tabular modeling, which uses tables and relationships with a fast in-memory engine to provide state of the art compression algorithms and query performance. The book begins by quickly taking you through the concepts required to model tabular data and set up the necessary tools and services. As you learn to create tabular models using tools such as Excel and Power View, you'll be shown various strategies to deploy your model on the server and choose a query mode (In-memory or DirectQuery) that best suits your reporting needs. You'll also learn how to implement key and newly introduced DAX functions to create calculated columns and measures for your model data. Last but not least, you'll be shown techniques that will help you administer and secure your BI implementation along with some widely used tips and tricks to optimize your reporting solution.

By the end of this book, you'll have gained hands-on experience with the powerful new features that have been added to Tabular models in SSAS 2016 and you'll be able to improve user satisfaction with faster reports and analytical queries.

Style and approach
This book takes a practical, recipe-based approach where each recipe lists the steps to address or implement a solution. You will be provided with several approaches to creating a business intelligence semantic model using analysis services.
anyone who wants to become competent at writing such formulas. Sample exercises that explain each concept are provided and followed by practice questions and answers to maximize learning and experience with DAX.

In BI Solutions Using SSAS Tabular Model Succinctly by Parikshit Savjani, delivering a business intelligence solution is broken down into simple steps to help you turn raw data into an interactive reporting dashboard. Savjani walks you through the layers of a BI solution, how to develop a tabular data model with SSAS, and how to prepare the data model for deployment before turning it into an interactive dashboard in Microsoft Power View. If you're just getting started with the Microsoft BI stack or looking for another analysis tool for your data, download the e-book today.

Prepare for Microsoft Exam 70-768–and help demonstrate your real-world mastery of Business Intelligence (BI) solutions development with SQL Server 2016 Analysis Services (SSAS), including modeling and queries. Designed for experienced IT professionals ready to advance their status, Exam Ref focuses on the critical thinking and decision-making acumen needed for success at the MCSA level. Focus on the expertise measured by these objectives:

- Design a multidimensional BI semantic model
- Design a tabular BI semantic model
- Develop queries using Multidimensional Expressions (MDX) and Data Analysis Expressions (DAX)
- Configure and maintain SSAS

This Microsoft Exam Ref:
- Organizes its coverage by exam objectives
- Features strategic, what-if scenarios to challenge you
- Assumes you are a database or BI professional with experience creating models, writing MDX or DAX queries, and using SSAS

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, and 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—

Offers information on the patterns and techniques of the formula language DAX.

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.

Written in an easy-to-follow, example-driven format, there are plenty of step-by-step instructions to help get you started! The book has a friendly approach, with the opportunity to learn by experimenting. If you are a BI and Data Warehouse developer new to Microsoft Business Intelligence, and looking to get a good understanding of
Design and implement fast, scalable and maintainable cubes with Microsoft SQL Server 2008 Analysis Services with this book and eBook. Learn Business Intelligence Markup Language (Biml) for automating much of the repetitive, manual labor involved in data integration. We teach you how to build frameworks and use advanced Biml features to get more out of SQL Server Integration Services (SSIS), Transact-SQL (T-SQL), and SQL Server Analysis Services (SSAS) than you ever thought possible. The first part of the book starts with the basics—getting your development environment configured, Biml syntax, and scripting essentials. Whether a beginner or a seasoned Biml expert, the next part of the book guides you through the process of using Biml to build a framework that captures both your design patterns and execution management. Design patterns are reusable code blocks that standardize the approach you use to perform certain types of data integration, logging, and other key data functions. Design patterns solve common problems encountered when developing data integration solutions. Because you do not have to build the code from scratch each time, design patterns improve your efficiency as a Biml developer. In addition to leveraging design patterns in your framework, you will learn how to build a robust metadata store and how to package your framework into Biml bundles for deployment within your enterprise. In the last part of the book, we teach you more advanced Biml features and capabilities, such as SSAS development, T-SQL recipes, documentation autogeneration, and Biml troubleshooting.

The Biml Book: Provides practical and applicable examples
Teaches you how to use Biml to reduce development time while improving quality
Takes you through solutions to common data integration and BI challenges

What You'll Learn
Master the basics of Business Intelligence Markup Language (Biml)
Study patterns for automating SSIS package generation
Build a Biml Framework
Import and transform database schemas
Automate generation of scripts and projects

Who This Book Is For
BI developers wishing to quickly locate previously tested solutions, Microsoft BI specialists, those seeking more information about solution automation and code generation, and practitioners of Data Integration Lifecycle Management (DILM) in the DevOps enterprise
integrated reporting and analytics capabilities. In this Preview 2 ebook, we introduce three new security features: Always Encrypted, Row-Level Security, and dynamic data masking; discuss enhancements that enable you to better manage performance and storage: TempDB configuration, query store, and Stretch Database; review several improvements to Reporting Services; and also describe AlwaysOn Availability Groups, tabular enhancement, and R integration. This book is a preview edition because it’s not complete; the final edition will be available Spring of 2016.

Get more out of Microsoft Power BI turning your data into actionable insights

About This Book
From connecting to your data sources to developing and deploying immersive, mobile-ready dashboards and visualizations, this book covers it all. Over 90 hands-on, technical recipes, tips, and use cases from across the Power BI platform. Proven development techniques and guidance for implementing custom solutions with DAX and M languages.

Who This Book Is For
This book is for BI professionals who wish to enhance their knowledge of Power BI beyond and to enhance the value of the Power BI solutions they deliver to business users. Those who are looking at quick solutions to common problems while using Power BI will also find this book to be a very useful resource. Some experience with Power BI will be useful.

What You Will Learn
- Cleanse, stage, and integrate your data sources with Power BI
- Abstract data complexities and provide users with intuitive, self-service BI capabilities
- Build business logic and analysis into your solutions via the DAX programming language and dynamic, dashboard-ready calculations
- Take advantage of the analytics and predictive capabilities of Power BI
- Make your solutions more dynamic and user specific and/or defined including use cases of parameters, functions, and row level security
- Understand the differences and implications of DirectQuery, Live Connections, and Import-Mode Power BI datasets and how to deploy content to the Power BI Service and schedule refreshes
- Integrate other Microsoft data tools such as Excel and SQL Server Reporting Services into your Power BI solution

Microsoft Power BI is a business intelligence and analytics platform consisting of applications and services designed to provide coherent, visual and interactive insights of data. This book will provide thorough, technical examples of using all primary Power BI tools and features as well as demonstrate high impact end-to-end solutions that leverage and integrate these technologies and services. Get familiar with Power BI development tools and services, go deep into the data connectivity and transformation, modeling, visualization and analytical capabilities of Power BI, and see Power BI’s functional programming languages of DAX and M come alive to deliver powerful solutions to address common, challenging scenarios in business intelligence. This book will excite and empower you to get more out of Power BI via detailed recipes, advanced design and development tips, and guidance on enhancing existing Power BI projects.

Style and approach
This book consists of practical recipes on Power BI that target novices as well as intermediate Power BI users. It goes deep into the technical issues, covers additional protocols, and many more real-live examples.
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 Pro DAX with Power BI 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.
Harness the powerful new SQL Server 2012. SQL Server 2012 is the most significant update to this product since 2005, and it may change how database administrators and developers perform many aspects of their jobs. If you're a database administrator or developer, Microsoft SQL Server 2012 Bible teaches you everything you need to take full advantage of this major release. This detailed guide not only covers all the new features of SQL Server 2012, it also shows you step by step how to develop top-notch SQL Server databases and new data connections and keep your databases performing at peak. The book is crammed with specific examples, sample code, and a host of tips, workarounds, and best practices. In addition, downloadable code is available from the book's companion web site, which you can use to jumpstart your own projects. Serves as an authoritative guide to Microsoft's SQL Server 2012 for database administrators and developers.

Covers all the software's new features and capabilities, including SQL Azure for cloud computing, enhancements to client connectivity, and new functionality that ensures high-availability of mission-critical applications. Explains major new changes to the SQL Server Business Intelligence tools, such as Integration, Reporting, and Analysis Services. Demonstrates tasks both graphically and in SQL code to enhance your learning. Provides source code from the companion web site, which you can use as a basis for your own projects. Explores tips, smart workarounds, and best practices to help you on the job. Get thoroughly up to speed on SQL Server 2012 with Microsoft SQL Server 2012 Bible.