

## Ranga Beeram

**Expert in delivering end to end Data Models, Data Warehouses, Self Service Business Intelligence Systems, and Analytical Platforms**

**Certified Microsoft Power BI Data Analyst  
Certified Microsoft SQL Server Professional  
Certified Tableau Professional**

Power BI | SQL | DAX | MDX | SQL Server | SSIS | SSAS | SSRS | Tableau | Alteryx | Business Intelligence | Data Warehousing | Data Analytics | Data Integration | Database Development | Data Reconciliation | Master Data Management

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<u>Database architecture, and platforms</u> <ul style="list-style-type: none"><li>• SQL Server (SSIS, SSAS, and SSRS)</li><li>• Conceptual modeling</li><li>• Logical modeling</li><li>• Physical modeling</li><li>• Data Profiling</li><li>• Data Quality</li><li>• Sybase</li><li>• Oracle</li><li>• IBM DB2</li></ul>	<u>Languages, and tools</u> <ul style="list-style-type: none"><li>• SQL</li><li>• Microsoft SQL Server Transact SQL</li><li>• Oracle PL/SQL</li><li>• MDX</li><li>• DAX</li><li>• SQL Server Business Intelligence Development Studio (BIDS)</li><li>• SQL Server Management Studio (SSMS)</li><li>• XML for analysis services (XMLA)</li><li>• SharePoint</li></ul>
<u>BI platform design, and development</u> <ul style="list-style-type: none"><li>• Delivery of self service business intelligence, and reporting solutions.</li><li>• Kimball style dim-fact dimensional modeling</li><li>• ETL design, and development using structured mapping documents using SSIS, and Alteryx</li><li>• SQL Server Analysis Services tabular model design, and development</li><li>• SQL Server Analysis Services multidimensional cube design, and development</li><li>• Data warehouse design, and architecture</li><li>• Data modeling using ER Studio, and Sparx</li><li>• Agile analysis, and development using market leading reporting, and analytics tools</li><li>• Design, and build dedicated SQL pools, and serverless connection pools to deliver DW models in Azure using Synapse to consume datasets from Azure Data Lake Storage (ADLS).</li></ul>	<u>Analytics, and reporting platforms</u> <ul style="list-style-type: none"><li>• Power BI</li><li>• SQL Server Reporting Services (SSRS)</li><li>• Tableau</li><li>• Alteryx</li><li>• Excel</li><li>• Power Pivot</li><li>• Qlik Sense</li><li>• Azure Synapse</li><li>• Python</li><li>• Databricks</li><li>• SQL Server Integration Services (SSIS)</li><li>• SQL Server Analysis Services (SSAS)</li><li>• Azure Data Factory (ADF)</li></ul>

**Domain knowledge:**

- Investment Banking, Financial Services, Prime Services, Securities Lending, Credit Default Swaps, Mortgage Backed Securities, Mutual Funds, Wealth Management, Hedge Funds, Health Care, Reinsurance, Media and Entertainment, Publishing, Legal, and Real Estate.

**Education:**

- M.S. Computer Science from University of Missouri-Rolla, Rolla, MO.
- B.S. Computer Science from Birla Institute of Technology and Science, India

**Certifications:**

- Microsoft Certified SQL Server Professional
- Tableau Certified Professional

**Work Experience**

**HSBC** **07/2023 – Current**

**Data Governance, and Business Intelligence Consultant**

**Power BI Data Quality, and Compliance Platform**

- Developed a SQL code generation platform for Oracle back-end systems, executing hundreds of data quality rules for critical data elements.
- Created a data quality workbench to consume data dictionaries for code generation and compliance evaluation based on AML business thresholds.
- Designed and implemented sophisticated compliance status visualizations in Power BI, utilizing conditional formatting to dynamically highlight pass/fail outcomes. These visual analytics enabled stakeholders to quickly pinpoint non-compliant areas and make data-driven decisions to ensure adherence to regulatory standards.

**Power BI Data Retention, and Evidencing Compliance Platform**

- Engineered a data compliance evidencing repository by integrating source data from diverse data sources (SQL Server, Oracle, DB2, file systems, big data platforms, and mainframes) in to a SQL Server environment.
- Managed ETL processes, and built robust Power BI data models utilizing DAX using calculated columns, and measures to enable the delivery of self service visual analytic reports.
- Deployed secure Power BI dashboards with data gateways, scheduled refresh, and row-level security, leveraging measures, calculated columns, and slicers for compelling visual storytelling.
- Automated compliance evidence documentation generation, and data extraction using Excel, Word, VBA Automation, Automated Document Generation, helping to communicate, and improve data accuracy and regulatory adherence across over 20 source systems.

**Tandym Group** **09/2022 – 06/2023**

**Business Intelligence Consultant**

- Delivered several Power BI applications for accounting, human resources, billing, time sheet, resourcing, and utilization departments.
- The data has been sourced from various internal, and third party cloud, and on premise systems. Various integrated Power BI data models using DAX have been developed, and deployed as datasets to enable self service interactive visual reporting.

Power BI apps along with row level security have been used to deliver targeted features to various members of the user community.

- SQL Server Analysis Services (SSAS) tabular models have been used to deliver enterprise wide billing, and accounting system data, and metrics using DAX across the company.
- Converted several legacy SSRS reports in to interactive Power BI reports, and Power BI paginated reports.
- Designed, and built several integrated data repositories using SQL Server, Transact SQL, and SQL Server Integration Services (SSIS).
- Led migration and optimization of several data processes to Azure, using Azure Data Factory for seamless ETL workflows. This initiative enhanced data accessibility and decision-making, aligning with the organization's strategic goals.
- Developed Azure Data Factory pipelines to automate data transformation, feeding into Power BI for real-time analytics on customer service and operational efficiency, significantly improving business insights and stakeholder engagement.

#### **Apple Bank**

**09/2021 – 08/2022**

##### **Data Management Consultant**

- Implemented a comprehensive data governance project towards delivering a data quality workbench to comply with bank security act regulations.
- Created a Python based listening service to seamlessly integrate incoming third-party banking transactions into a historical database on SQL Server.
- Developed and executed hundreds of SQL-based data quality rules encapsulating data quality rules on critical data that is used by compliance systems as part of regulatory requirements using Microsoft SQL Server.
- Created a visual workbench using Excel and Tableau, displaying error rates and data discrepancies based on agreed-upon KPI metrics.

#### **Proskauer**

##### **Business Intelligence Consultant**

**08/2019 – 08/2021**

- Delivered financial planning, and analytical reports, dashboards, and data models using Power BI, DAX, SSRS, SQL Server, and Excel.
- The key Power BI dashboards centered around core metrics relating to revenue, realization, billing, and productivity have been built using Power BI desktop, and deployed to the on prem Power BI Report server.
- The work includes data source analysis, cleansing, and data shaping using Power Query followed by modeling the objects, and relationships with in Power BI by incorporating the appropriate relationships, calculated columns, and measures using DAX.
- The Power BI dashboards have been built by combining the appropriate dimensions, attributes, measures, filters, and slicers along with row level security.
- Delivered interactive Power BI dashboards for the global marketing, and new business generation teams to help analyze the pipe line of the flow of new opportunities for the firm.
- Delivered Power BI data reconciliation dashboards to support the firm wide conversion of upstream time, billing, finance, and analysis systems
- Delivered Power BI data models, and dashboards to enable the administration of Power BI dashboards, and SSRS reports. This model, and interface provides an integrated access to Servers, Reports, Datasets, Security, SQL Server objects consumed in the datasets, and subscriptions.
- Designed, and built dedicated SQL pools, and serverless connection pools to deliver DW models in Azure using Synapse to consume datasets from Azure Data Lake Storage (ADLS).
- Delivered ETL, and analytics execution automation for an internal data governance initiative to perform data loads, and run data quality validation workloads using Python, and SQL Server.
- Designed, and built an extensive data model, and supporting back end data processes to enable the automation of SSRS reports, and data driven subscriptions.

#### **Mizuho Securities**

**08/2017 – 07/2019**

##### **Data Warehousing, and Business Intelligence Consultant**

- Design, development, and support of the core derivatives enterprise reporting platform for the capital markets group. This system is also used to generate sub-ledger, and general ledger entries to support reconciliation with the people soft system

for the accounting department. This database platform serves as a golden source of end of the day data, and supports all financial, and regulatory reporting.

- The system captures, and reports on Counterparties, Deals, Cash flows, PV, Potential exposure, Collateral details, and Credit for all types of transactions including Swaps, Bonds, ETDs, Futures, and Options.
- Several core derivative, and accounting regulatory reports, and dashboards have been built using SQL Server, Power BI, and Qlikview.
- The technology used to deliver the reporting platform includes SQL Server, SQL Server Integration Services, SQL Server Reporting Services, **Power BI**, Excel, and Tidal. Reporting data is aggregated from several source systems residing on Oracle, Informix, Sybase, and SQL Server using SQL Server Integration Services, Transact SQL, Stored Procedures, and Tidal.

#### **KPMG**

**02/2016 – 08/2017**

##### **Data Warehousing, and Business Intelligence Consultant**

- As part of the Enterprise Data Warehousing, and Business Intelligence Team, participated in the design, and development of Staging, Warehouse, and Datamart environments
- The data was loaded from multiple enterprise wide data sources using master, and child SSIS packages, Transact SQL, and Stored Procedures.
- Fact, Dimension, and Bridge tables have been loaded incorporating best practices of modular development, logging, configurations, and history.
- Participated in full life cycle development in development, QA, UAT, and production environments including database table design, development of stored procedures, script management, and sql server agent jobs.
- The technical platform includes SQL Server 2012, SQL Server 2016, Transact SQL, SQL Server Integration Services (SSIS), SQL Server Agent based job scheduling, Visual Studio, Team Foundation Server, and **Tableau, Power BI, Power Pivot, and DAX.**

#### **PwC**

**01/2015 – 01/2016**

##### **Business Intelligence Consultant**

- Architect, and developer for a visual analytics solution for the finance department using **Tableau** Desktop 9.0, Tableau Reader, Excel, SQL Server, and Alteryx.
- Integrated a set of business reporting data sources, and managed system data sources in to a uniform data layer for the next generation Tableau visualization solution using worksheets, dashboards, and stories.
- Implemented user based security, and a key code based solution to deliver a customized solution platform for the business units using a single Tableau workbook.
- The Tableau guided analytics solution uses data sources, joins, data source relationships, data blending, parameters, quick filters, action filters, row based calculated columns, set based computed columns, bar charts, line charts, donut charts, high light tables, and custom formatting to deliver interactive worksheets, dashboards, and stories.

#### **Citi**

**08/2013 – 12/2014**

##### **Business Intelligence Consultant**

- Designed, and implemented a data warehouse platform for the Residential Mortgage Backed Securities trade, and loan information in a SQL Server environment.
- The project includes the data warehouse design, and implementation, ETL design, and implementation, and the design, and implementation of reports using Microsoft SQL Server 2012, SQL Server Integration Services (SSIS), SQL Server Reporting Services (SSRS), **Power Pivot** (initial version of **Power BI**), **DAX, Power View**, and Share Point to support trading, and regulatory reporting requirements.

#### **Continuum Health Partners**

**10/2012 – 07/2013**

##### **Business Intelligence Consultant**

- Designed, and delivered a dimensional data mart, and OLAP cubes for a large multiple facility health care group using SQL Server 2008 R2, SQL Server Analysis Services (SSAS), SQL Server Integration Services (SSIS), SQL Server Reporting Services (SSRS), Power Pivot, Power View, and Share Point.
- Incorporated the extensive domain knowledge present in the team to design a set of kimball style star schemas to support self service reporting.

- The appropriate ETL procedures have been written to accomplish a periodic load of source system data in to the SQL Server data mart tables using change data capture (CDC), and SQL Server Integration Services (SSIS).
- Multiple SQL Server Analysis Services (SSAS) cubes have been designed, and built consuming the shared data mart containing a conforming set of dimensions, and fact tables. This includes dimension design, setting up measure groups, establishing attribute relationships, managing role playing dimensions, and relating dimensions to measure groups directly, and using many to many relationships. MDX is used appropriately in extending the cube design for calculations, role based security, implementing dynamic conversion using scope statement, and creating named sets.
- The end user business analysts consume the data using SQL Server Reporting Services (SSRS), report builder, power pivot, and excel, and deploy the reports to a shared reporting services environment. The design has been appreciated by the key stake holders for its ability to democratize information within the group by using self service slice, and dice reporting tools.

## KPMG

03/2012 – 09/2012

### Business Intelligence Consultant

#### Global compliance business intelligence system

- Designed, and developed a global compliance data mart, analytics, reporting, and forecasting system integrating individual country regulations, client information, employee information to deliver a flexible partner rotation system across business lines.
- Technical platform includes SQL Server 2008 R2, SQL Server 2008 R2 Analysis Services (SSAS), SQL Server 2008 R2 Integration Services (SSIS), SQL Server 2008 R2 Reporting Services (SSRS), SQL, MDX, C#, and ASP.NET.
- Core responsibilities include
  - Data mart design, and implementation in SQL Server 2008 R2.
  - Cube based OLAP design, and implementation using SQL Server 2008 R2 Analysis Services (SSAS).
  - Lead, and mentor a team in the design, and implementation of extraction, transformation, and loading (ETL) layer using SQL Server 2008 R2 Integration Services (SSIS) to move data across different systems.
  - Lead, and mentor a team in the design, and development of analytical, and forecasting reports using SQL Server 2008 R2 Reporting Services (SSRS), and SQL Server 2008 R2 Analysis Services (SSAS).
- Evaluated source system data, and reporting artifacts to arrive at a star schema dimensional model containing dimension tables, fact tables, and bridge tables based on the kimball methodology. Evaluated, and implemented the data mart in SQL Server 2008 R2.
- Designed, and implemented an OLAP cube based analytics platform containing data source, data source view, measures, measure groups, dimensions, attributes, dimension usage, and calculated members.
- Integrated a known package development, and logging framework using SQL Server 2008 R2 Integration Services (SSIS) in to the project environment. Directed a team to implement the packages to accomplish the extraction, transformation, and loading (ETL) of source business data containing clients, employees, regulations, roles, member firms, and status information.
- Development of analytical, and forecasting reports using SQL Server 2008 R2 Reporting Services (SSRS), and SQL Server 2008 R2 Analysis Services (SSAS). The parameterized reports use data sources, data sets, and custom MDX to connect to SSAS OLAP cube.

## National Benefit Fund

### Business Intelligence Consultant

07/2010 – 02/2012

#### Eligibility, Benefits, Training, and Finance datamarts, and cubes

Designed, and developed data marts, cubes, and reports to deliver mission critical reporting, and analysis data to the enterprise using Microsoft SQL Server 2008, Transact-SQL, SQL Server Integration Services (SSIS), **SQL Server Analysis Services (SSAS)**, SQL Server Reporting Services (SSRS), Report Builder, Excel, ProClarity, and Power Pivot.

- The SQL Server Kimball style **STAR schema** dimensional data mart is consumed through an intermediate layer of views in the **data source view (DSV)** of the **Universal Dimensional Model (UDM)** of **Business Intelligence Development Studio (BIDS)**.
- Designed, and implemented custom dimensions including appropriate attribute hierarchies, custom hierarchies, parent child hierarchies, attribute relationships using **BIDS**, and deployed in to the **SSAS** environment.
- Implemented, several **measure groups** from the underlying **fact** tables to accomplish the exposure of business critical measures to the end user tools in **SSAS**.
- The conforming set of dimensions are related to the appropriate measure groups at the correct grain level in the dimension usage area of the **BIDS**, and deployed to **SSAS**.

- Concepts of fact dimensions, and **many-to-many** relationships are implemented in the dimension usage area of BIDS.
- Implemented role playing cube dimensions using database dimensions to handle different types of date values in the fact tables in **SSAS**.
- Role based security has been implemented in the **SQL Server Analysis Services (SSAS)** using custom dimension security, and **MDX** expressions.
- **Aggregations** have been built, and maintained in order to enable performance in **SSAS**.
- A custom measure group partitioning scheme has been implemented in order to enable processing, and performance in **SSAS**.
- Custom calculations have been implemented using MDX to accomplish incremental business requirements using the basic measures. Custom dimensions have been implemented using the scope concept in the calculations area of the cube.
- The dimensions, and measure groups are processed using scheduled SSIS packages.

#### **Credit Suisse**

##### **Business Intelligence Consultant**

**07/2009 – 06/2010**

##### **Prime Services, and Securities Lending Business Intelligence Platform**

Built a next generation reporting, and visual analytics platform to deliver securities lending, client performance, and spreads analysis information to support the prime services business. The technology platform includes Microsoft SQL Server 2005, Transact-SQL, SQL Server Integration Services (SSIS), SQL Server Analysis Services (**SSAS**), SQL Server Reporting Services (SSRS), and Tableau.

#### **Cushman and Wakefield, New York**

##### **SQL Server BI Consultant**

**01/2008 – 06/2009**

##### **Enterprise wide data warehouse project**

This project is an end to end data warehousing project that involves the analysis of source systems, relational data warehouse design, extraction transformation, and loading (ETL) from source systems to the target data warehouse, building of online analytical processing (**OLAP**) cubes, building sophisticated set of end user reports, and building a portal based delivery mechanism for the distribution of information to the enterprise.

The technology platform includes Microsoft SQL Server 2005, Microsoft SharePoint Server, Transact-SQL, **MDX**, SQL Server Integration Services (SSIS), **SQL Server Analysis Services (SSAS)**, SQL Server Reporting Services (SSRS), ASP, and C#.

#### **Bank of America, New York**

##### **SQL Server BI Consultant**

**05/2007 – 12/2007**

##### **Global credit products risk**

Part of the strategic P&L project team involved in the development and management of partitioned high volume data environment to handle accounting and P&L data for credit related products. This Microsoft SQL Server data warehouse handles the loading and storage of daily trade and accounting data. Partitioned environment and a relational OLAP based design enables the handling and effective searching of large volume of data.

Participated in the development and management of the risk engine database platform; The risk engine database stores the risk data for credit related products using a Microsoft SQL Server based partitioned data environment. Responsibilities include credit default swaps support, database modeling, database design, database development, performance monitoring, and query tuning. Tools include SQL Server 2000, SQL Server Enterprise Manager, SQL Query Analyzer, and SQL Server 2000 Data Transformation Services.

#### **Eton Park Capital Management, New York**

##### **Database Consultant**

**07/2006 – 03/2007**

##### **Information Technology**

Responsibilities include enterprise wide database administration, database modeling, database design, database development, performance monitoring, query tuning, SQL Server 2005 server upgrade, database migration, and ASP.NET development using C#. The platforms include SQL Server 2000 and SQL Server 2005.

Tools include SQL Server Enterprise Manager, SQL Query Analyzer, SQL Server 2000 Data Transformation Services (DTS), SQL Server 2005 Management Studio, Business Intelligence Development Studio, ERWIN and Visual Studio.

#### **Credit Suisse, New York**

**10/2003 – 06/2006**

##### **Vice President**

##### **Global Credit Derivatives**

- Designed and developed issuer performance report for commercial mortgage backed securities structured products research group using VB and Microsoft SQL Server 2000. Designed and developed a loss estimate data management platform using Excel, VBA and Microsoft SQL Server 2000.
- Designed and developed a database platform for the delivery of usage reports for the fixed income sales and research applications.
- Participated in the enhancement of credit default swaps trade capture application using C# and Microsoft SQL Server 2000.
- Designed and developed a generic database archival platform using Microsoft SQL server 2000.
- Delivered database services to the credit life insurance trade capture application.
- Participated in the enhancement of a data warehouse application using Microsoft Analysis Server, Microsoft SQL Server 2000, dimensions, measures, fact tables, MDX and data transformation services (DTS) packages.
- Provided support to the credit default swaps trading and middle office groups. This includes P&L applications that compute risk, derivatives order management system, credit spreads marking tool and market data system.