



HOW A MIDSIZE RETAILER IMPLEMENTED MODERN ANALYTICS WITH POWER BI AND SQL SERVER

CHALLENGE

Retail companies required efficient methods to analyze and visualize data to answer day-to-day business questions and improve decision-making.

WHAT IS POWER BI AND MS SQL SERVER?

Power BI is a Microsoft tool for business intelligence. It allows users to analyze data, create visual reports, and make data-driven decisions. The suite includes Power BI Desktop, Service, and Mobile Apps. Microsoft provides various options on licensing models for Power BI, and implementing the license correctly can save companies resources. **Microsoft SQL Server** is a relational database management system developed by Microsoft and uses TSQL to interact with the DB.

WHY WAS SQL SERVER AND POWER BI INTRODUCED TO THIS RETAILER?

REQUIREMENT

Organizations require efficient methods to store, analyze, and visualize data to gain actionable insights and improve decision-making. This case proposes utilizing Microsoft SQL Server and Power BI to achieve this objective.

BOTTLENECKS AND SOLUTIONS

MICROSOFT SQL SERVER

- This robust relational database management system will engage as the central data repository for their written and delivered data.
- Data would be brought in from NOSQL DB on an interval.
- Data cleansing and parsing process would be required to build relational data.
- Since SQL Server excels at storing and managing large volumes of structured data from various sources, we introduced other data sources to SQL Server to manage retailers' traffic and goal threshold data using CSV, EXCEL, Rest API, and others.
- SQL Views, Stored Proc, and Queries enable efficient data retrieval and manipulation.

POWER BI

This business intelligence platform transformed our stored data into interactive reports and dashboards. Using Power BI Gateway, it connected to our new Microsoft SQL Server data and converted it into interactive reports and dashboards.



BENEFITS OF POWER BI AND RELATIONAL DB TANDEM

Relational databases, like Microsoft SQL Server, act as the foundation of modern reporting and BI architecture. While the relational database stores the data, BI tools like Power BI act as the architect, transforming raw data into reports. You can think of data stored in SQL Server as the raw material required to build a house. Power BI seamlessly connects to your relational database, extracting the data and transforming it into charts, graphs, and other easy-to-understand visualizations. Power BI is an excellent storytelling tool that paints your business picture. With this tandem, you get Improved Data access and analysis, data-driven decision, collaboration, scalability and agility.

BUSINESS RESULT

They adopted Microsoft SQL Server as an intermediary, which allowed them to create custom tables, manage data efficiently, and adapt to changing business needs within minutes. Power BI was introduced as an agile business intelligence platform with analytical and reporting capabilities that could handle complex data structures from a non-proprietary database without changing the current POS system. Organizations can unlock the power of their data by introducing MS SQL Server's data management capabilities with Power BI's data visualization tools. This combined solution promotes a data-driven culture, empowering users to gain valuable insights and make informed decisions.

ABOUT XTIVIA

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