A leading distributor of books to public libraries & schools uses Azure Synapse Analytics and Power BI to improve user experience and business performance



Background

The customer is the premier worldwide distributor of books, digital content, and entertainment products for approximately **25,000** suppliers in **120 countries**.

Business Challenge

The customer has developed a **reporting solution in QlikView for Publishers** to provide insights about content circulation and other elements that help Publishers.

The solution was inefficient and was not supportive of managing large volumes of data (16 Billion) & 1,000+ publishers simultaneously. With a growing readership, timely and accurate data insights are crucial to staying competitive.

The solution architecture was not scalable and had limitations when readers accessed the reports, which impacted the business performance. The customer was keen to build a solution to overcome the following challenges:

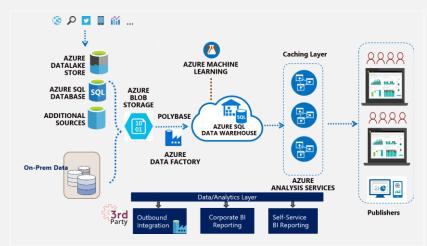
- Reduce the time to load the report to 4 secs
- Handle large volumes of data efficiently
- Build reports through volumes of data for better data insights & rich reporting capabilities
- Have the flexibility to scale up and down
- Optimize resource utilization-cost

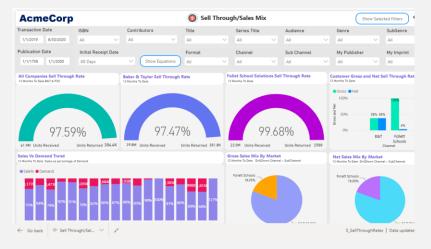
WinWire Solution

WinWire proposed a robust architecture to develop the solution using **Azure and Power BI**. We supported the customer to:

- Develop a high-performance data ingestion pipeline using **Polybase** to move the data over the network
- Terabytes of data are stored in Azure Synapse Analytics, processed large volumes of data and complex calculations resulting in faster insights and limitless scale
- Supported large volume of data comprising 17 billion rows & 200 concurrent users, with the scalability of up to 1,000 users.

- Auto scale-out & scale back compute adjustment based on data peak periods for improving query performance
- Optimized cost by offering the flexibility to pause the data warehouse when not consumed
- Rich data insights & reporting capabilities provided using Power BI
- A customized search-based algorithm to give more visions on new releasing titles
- Reports are embedded into a third-party .NET application





Business Value

- Elevated business efficiency and performance
- Improved user experience
- Reduced the time to load the report to 4 secs

