



Streamlining Power BI big data consumption

Retail is driven by data. An auto-replenishment supplier turned to us for help streamlining their Power BI-powered customer dashboards, as the immense volume of data slowed delivery of the data they needed to analyze.

Technologies & tools

- Power BI
- Power BI Embedded
- Azure Data Explorer
- Power BI dataflow

Industry

Retail

Challenge

An auto-replenishment provider offers a service that plugs into any customer's e-commerce system to determine the right timing and quantity to re-order products using machine learning algorithms. Through their business model, the client tracks huge amounts of web traffic and e-commerce data and needed to create customer dashboards showing the value of their service as well as internal dashboards to ensure their processes are operating efficiently and accurately.

They had started to use Power BI to directly consume e-commerce data and web traffic data, but quickly ran into issues with the volume and velocity of data they were trying to analyze.

Solution

Inviso developed a **data platform in Azure and Power BI utilizing Azure Data Explorer** to consume web traffic data and **Power BI dataflows** to perform data cleansing, merging, etc. The data is stored in **Azure Data Lake** so Power BI can be easily used by business analysts to develop the dashboards and reports needed for customers.

Results

- Power BI model refresh **timing dropped to 10 minutes from over four hours** by moving most of the heavy lifting and long-term storage of e-commerce data to dataflows.
- The **Power BI model was greatly reduced in size** by completely removing the clickstream data and instead using Direct Query. Developers who previously could not open the model on their desktops now have easy access.
- The client now has an **affordable platform that can quickly scale** as new customers are onboarded - a huge benefit as they recently signed up a major retail pharmacy chain.