



Kolbe Windows & Doors manufactures and sells millwork to builders and contractors through a distribution network of dealers across the United States.



The Business Situation

Kolbe provides quoting software to their dealers through a third-party vendor – which has been on-premise software but is now moving to a cloud-based solution. To facilitate use and consumption of the data being collected, many views of the data were exposed, and a Power Pivot data model was created. The model centered around a Quote fact table with several dimensions, including Customer and Date to facilitate analysis by end users. This Power Pivot model was then exposed in Excel and provided graphical and tabular analysis capabilities. Kolbe leadership recognized they were now ready for the next evolution of their BI capabilities. They contacted Skyline to develop enhanced reporting, data visualization, and content distribution capabilities to empower their dealers to use the data to know which opportunities/customers to pursue.

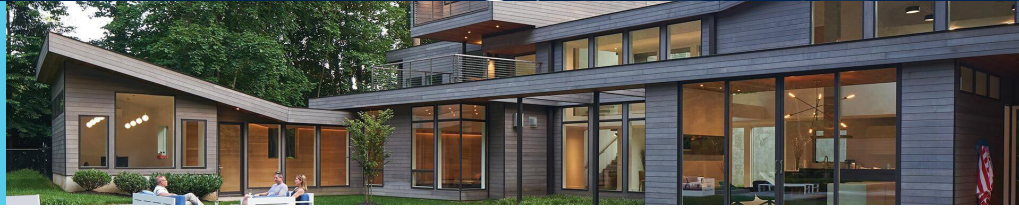
The Solution

The timeline for the project was just under four months. Using Agile methodology, work was planned in two-week sprints. Skyline met with Kolbe for daily standup meetings, sprint demonstrations, sprint reviews, and sprint planning. For most functionality, Kolbe provided a “bullet point” view of the goals they wanted to achieve for the sprint and let Skyline design and present options to achieve it. Ideas were presented, approved or revised, and accomplished quickly.

Database changes and the transformation of source data to the conformed data warehouse model were performed quickly and seamlessly using Skyline’s SkyBITS ETL generation component. This removes the mundane aspects of data flow maintenance and allows developers to focus on the accuracy and quality of data content. Azure Data Factory API processes, as well as data warehouse ETL stored procedures, were scheduled in the same batch in an end-to-end process. Azure DevOps was key in enabling our team to plan the work, design and communicate, and rapidly turn ideas into a working application.

Using Azure Data Factory, the Kolbe-Skyline team pulled quote and order data from Kolbe’s ERP partner vendor’s API. Our team also employed Skyline’s proprietary SkyBITS product to generate metadata-driven data warehouse ETL procedures and provide robust data orchestration components to manage and schedule data transformation processes. With centralized access using SQL Server Analysis Services Tabular Model, Power BI reports were published to display data in a rich visual manner that emphasized key performance indicators and replaced cumbersome legacy grid layout reports.

Skyline refined and enhanced the data model and included source data from the vendor’s cloud-based data. Automated nightly processing (to start) executes on a client server to acquire data and provide timely information. Additional metrics were modeled to provide straightforward end-user analytical capabilities, including year-to-date, month-to-date, prior year-to-date, etc.



Technology



Azure Data Factory



DevOps / GIT Repository



Power BI



SkyBITS



SQL Server Analysis Server
Tabular Model



Visual Studio SQL Server
Data Tools (SSDT)

The Results

As work was completed, functionality was on display using the Power BI service. Reports and dashboards demonstrated quote conversion rate calculations, time-intelligence measures (year to date, month to date, etc.). One Power BI report was embedded in a SharePoint CRM page to expand on customer performance and provide deeper insight to quote conversion trends, along with quote "owner" performance.

Kolbe now has timely access to key data points via rich visuals in Power BI. Users can slice and dice charts and graphs and drill down into the data to uncover hidden insights. Data can be viewed on smartphones via the Power BI app. Users can also set up alerts for a wide range of activities like notifying sales managers when high dollar quotes are created, or if data quality issues need to be investigated.

About SkyBITS

The SkyBITS data orchestration component is a cloud-based, source system agnostic tool. Along with scheduling data movement activities, SkyBITS tracks and records data lineage and data usage – providing process performance metrics. SkyBITS' rich user interface provides the tools to schedule activities, establish dependencies, and monitor all batch activities. SkyBITS' patent is pending.

Partnership

Microsoft
Partner



Gold Application Development
Gold Data Analytics
Gold Cloud Platform
Gold Cloud Productivity
Gold Collaboration and Content
Gold DevOps