

BEE6

powered by BEEZ

Supply Chain Visibility

Overview

Retail can best be described as the buying (or making), moving, and selling of products to consumers. While we have witnessed significant shifts in how retailers operate in the past decade, the basic premise of buy-move-sell still holds true.

The core objective of a retail supply chain, whether private brands or national brands, is to manage the flow of product from a supplier (manufacturer or distributor) to the customer. The goals of a retail supply chain have remained relatively consistent over the years. The first is the efficient and expedient fulfillment of customer demand. This goal often includes balancing inventory costs against the potential for lost sales. Next is the optimization of costs, primarily transportation and logistics. Supply chains must be able to respond quickly to unforeseen events such as supply outages, natural disasters, geopolitical unrest, and significant shifts in consumer demand. Finally, and increasingly, supply chains must navigate a myriad of regulatory and compliance mandates.

Supply Chain Visibility

Having high quality visibility of goods as they move from suppliers to customers is essential to achieving supply chain objectives. In fact, a commonly used phrase to describe supply chain visibility is the “glass pipeline”. As the name suggests, the idea of a glass

pipeline is to provide complete transparency and visibility to the flow of goods.

Ideally supply chain leaders should have visibility into detailed information including orders and order status, receipts, promised dates, shipping details, freight rates, regulatory information, supplier operating status, on-hand inventory by locations, demand plans, supplier capacity and more. All of this information should be available in real-time to gain all of the benefits of supply chain visibility.

Armed with this information, supply chain leaders can effectively route goods to match customer demands, reduce costs associated with out of stocks and excess inventory, reduce risk for non-compliance, and respond quickly and confidently to unforeseen events.

Unfortunately, few retailers have achieved this level of supply chain sophistication. There are multiple impediments to achieving supply chain visibility. Most retailers have multiple, loosely coupled applications that are used to manage the end-to-end flow of products in the supply chain. These applications are often from different vendors, have different database schemas, and are difficult to integrate. Most retail supply chains deal with a large number of suppliers, each with their own applications and cadence in delivering

information. Increasingly retailers are dealing with new regulatory challenges as supply chain expand globally. Compounding all of this is the high velocity and high volume of data needed to make decisions. Supply chain leaders must be able to connect highly disparate and high velocity data in a fast and meaningful manner to drive decisions. This has proven elusive to most retailers.

The core problem in supply chain visibility is disconnected data. Data needed to make decisions exists inside the retail organization in various systems such as e-commerce, point-of-sale, warehouse/inventory management, transportation management, demand/sales forecasting, vendor management, and likely others. In addition, this data must be merged with data from suppliers, distributors, and government agencies to create a comprehensive view to enable decisions. Retailers have traditionally thrown labor and ad-hoc solutions at the problem to build views of data to facilitate decisions. However, performance issues, lack of data standards across systems, and rapidly changing requirements have greatly limited the effectiveness of these solutions.

How BEE6 can help

BEE6 QueenBeez is a graph analytics pipeline tool that excels at discovering connections between data. At the heart of QueenBeez is a graph database engine. Graph database technology is specifically designed to search and analyze connected data. In short, graph databases are designed to place primary emphases on data relationships.

BEE6 QueenBeez enables supply chain leaders to visually draw a model of how they want to see their data, unencumbered by the nuisances of the physical data sources. Once the model is built, Queenbee connects to data sources and maps the data into the

model. Rules can be defined to handle missing data, duplicate data, and other exceptions.

Once the data is mapped to the model, supply chain leaders can leverage a library of pre-built graph algorithms to their data or write their own queries. For example, a common graph algorithm is path analysis. Using path analysis supply chain leaders can quickly determine which supply chain paths are the longest, which are the most expensive, or which have the highest degree of shrink.

Once the analytics have been completed, insights can be forwarded to a desired data repository to be queried by your favorite analytics tool. The results can even be forwarded to another pipeline to allow you to build very complex analysis, all without requiring a single line of code.

BEE6 QueenBeez orchestrates all of the activities, from modeling, mapping, data ingestion, analytics, to delivery of results from a central console. QueenBeez's no-code interface enables existing organizational resources to easily begin leveraging powerful graph analytics without extensive training.

BEE6 QueenBeez pipelines are centrally managed and discoverable, enabling supply chain teams to quickly find and leverage the appropriate model for analysis. This saves time and greatly reduces the labor needed to find the patterns and trends to drive increased supply chain efficiencies.

As the graph engine is imbedded in the BEE6 QueenBeez pipeline, IT organizations don't have to adopt or support new technologies. With QueenBeez it is simply connect, analyze, and deliver insights.

REQUEST A FREE DEMO

Email us at SALES@beeznow.com
