

Enabling Self-service BI for a Leading Retailer within a Short Span of Two Weeks



Summary

We helped a leading retailer take the first step toward their goal of achieving total Self-Service Business Intelligence (BI) capabilities. They asked us to build three warehouse management dashboards to test its merits. We used MicroStrategy's Visual Insights feature to capture all users' reporting requirements and delivered them in record time of two weeks.

Industry

Retail

Users

Warehouse Managers, Sales Managers, Supply Chain Team Leads

Technologies

MicroStrategy, Hadoop, Impala, DataStage

Team Size

5 InfoCeptians
3 Client Associates

InfoCepts Accelerators or Assets Used

MicroStrategy on Hadoop Fast Track

→ The Challenge

Our client is a European retailer with presence in more than 60 countries. The competitive nature of their global business required them to democratize insights. They felt that Self-service Business Intelligence (BI) would best suit their tactical and strategic needs. This was their first ever BI initiative so they wanted to be sure of its organizational benefits.

They needed to quickly test Self-service BI before committing to invest in a full-blown solution. This was because our client wasn't sure about their users' exact reporting requirements. We had to find a mechanism to capture them. They wanted to see how such a solution could solve their routine need to reduce lead times, optimize order fulfillment, manage stock and optimize warehouse space.

Therefore, for the first leg of their Self-service BI journey, they chose Warehouse Management System (WMS) and Retail Merchandizing System (RMS) data for analysis. They asked us to develop three warehouse management dashboards –

1. Lead Time Dashboard – For accessing KPIs and identifying the most time consuming tasks
2. SLA Dashboard – For evaluating supply and dispatch commitments along quantity, time and quality parameters to achieve required efficiency levels
3. Space Management Dashboard – For optimizing floor-space, managing stock and moderating operations

The main objectives we had to fulfill were –

- Provide a single interface for reporting, dashboarding and accessing granular data
- Enable historical and consolidated analysis

→ The Solution

We assessed the existing system architecture and concluded that MicroStrategy best served our client's BI needs. They had used Oracle Retail Data Model (ORDM) to analyze supply chain data within a Hadoop environment. All the WMS and RMS data we would need was already there in a consolidated form. This was an ideal setup for using MicroStrategy's Visual Insights (VI) feature.

VI enabled us to build dashboards in a highly efficient manner. We rapidly created Hadoop schema exploration objects to harness MicroStrategy's BI capabilities. This method helped us meet our client's budget and time limitations. Here are some highlights –

- Dashboard development was rapid as dummy data was used for prototyping
- Rapid prototyping was helpful in negating users' reporting requirement ambiguities
- We could create complex graphs like a graph matrix in minutes
- We could effortlessly import interactive D3 visualizations
- VI changes were accommodated easily and efficiently
- Color formatting was set globally for metrics and attribute elements across all visualizations in one go

→ The Results

We were able to deliver each self-service VI dashboard in no more than 14 days and offer the following benefits –

- All three dashboards can be accessed from a single landing page
- Users across the enterprise can access Warehouse Management KPIs without IT support
- Users can create their own dashboards with easy drag and drop action
- Top N Analysis can be done on the fly
- Visualizations can be exported in PDF format or in CSV format