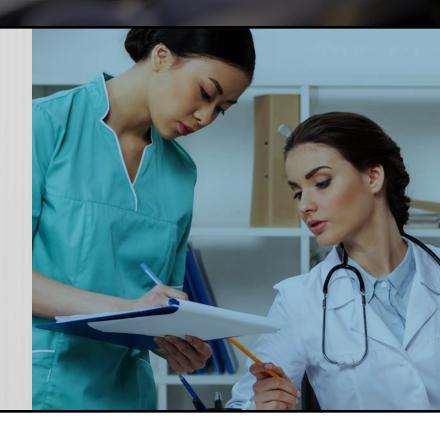A multinational medical product manufacturing company that sells products directly to clients through a network of different agencies needed help.

# Aptude's Power BI Implementation Case Study

## The Challenge

Aptude worked with a multinational biomedical product manufacturer to overcome the overwhelming velocity of data delivered for BI visualization. This unstructured data was composed of millions of records from a wide variety of different sources in various formats. The implantation of a Power BI driven visualization tool needed to be running and utilized by thousands of users in less than 6 months.

## Key Concerns

- The unstructured data was comprised of around 90 million sales transaction records from different agencies, many of which were still just stuck in Excel sheets.
- We needed to transform raw data into a structured format for more efficient data analysis and better overall design.
- We needed to understand the definitive business logics and product hierarchy to generate accurate predictive models.

## Technology Used

**SPSS**  **Power BI**

**axure**  **python**
Data Lake    R Language

**SQL, SSIS**

## Notable Obstacles

- Customer had SAP BO and Cognos as the only visualization tool.
- Customer required a solution that could help them consolidate, merge, and analyze the data to give them critical insights in order to make informed decisions.

## What We Accomplished

- **Turned unstructured data into beautiful visual reports that gave deeper insights on key performance areas.**
- Reports helped the customer analyze their sales figures, quantity and returns against each geography, agency, channel, time period (per week) across different product categories, helping them make informed decisions for the future.
- With the help of predictive analysis the company was able to forecast the sales figures and inventory demand for subsequent months.

## Aptude's Solution

- Comparative analytics of available options to select the best suited option for the client's environment.
- Architecture of a right cloud solution.
- Setting up Azure Data Lake.
- Data Ingestion– Data Ingestion using API's from different sources.
- Data Storage– Use of Azure data Lake to store data from various sources.
- Data Cleansing– Ingested data was scrutinized closely for data quality. All blank and duplicate records were removed. All irrelevant or orphaned records were removed from the database.
- Identified key attributes and common factors for consolidation of the data sets.
- Developed data models.
- Integrated the data source to Power BI to create KPIs and measures. Reports were created using Power BI to analyze and gain insights.
- Created various intuitive, interactive and customized visualization reports.

## Conclusion

Could your organization benefit from a Power BI solution? If you handle large unstructured data sets that require good architecture, then look no further. Aptude brings two decades of IT consulting to the table, with an expertise in Power BI implementations and both Microsoft and Oracle business intelligence solutions.

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