CASE STUDY

Quantzig's Big Data Analytics Helps a Pharmaceutical Industry Client Devise Robust Risk Management Strategies

The client: Pharmaceutical industry player

Area of engagement: Big data analytics

The global pharmaceutical industry includes businesses involved in the research, development, manufacturing, and distribution of medicines. The medicines offered by these pharmaceutical industry firms play an essential role in preventing health complications, improving health outcomes, and increasing the lifespan of individuals. The pharmaceutical industry also includes over-the-counter (OTC), biologically-derived, and prescription-based products. The increase in the number of middle-class population in both developed and emerging countries coupled with higher disposable income and expectation of better healthcare solutions are driving the growth of this industry. Moreover, the industry is witnessing a high demand for innovations that would revolutionize patient treatment patterns in the coming years.

However, several factors are expected to influence the growth projections of the pharmaceutical industry in the coming years. These factors include:

- Shift to value-based payments: As a whole, the pharmaceutical industry is moving toward value-based payments from volume-based or fee-for-service based payments. This system helps firms increase the quality and value of the healthcare services offered. The pharmaceutical industry is also looking to devise value-based purchasing but is expected to face challenges in approximating a suitable time-frame for manufacturers to demonstrate drug efficacy.

- The slower growth rate in emerging markets: The reduction in the GDP of developing and low-income countries with high pharmaceutical growth prospects has triggered a corresponding decrease in the volume growth. However, unless these emerging markets pick up on their economic growth, the development of the pharmaceutical industry in these regions will prove to be difficult.

Many such factors are compelling pharmaceutical industry players to leverage the use of big data analytics solutions. Big data analytics solutions assist companies in increasing the use of sophisticated analytics software to boost sales. Also, these solutions help companies gain actionable insights into ways to improve the overall customer experience.

The Business Challenge

The client, a leading pharmaceutical industry client with business units spread across the globe, wanted to analyze a wider variety of data sources to improve their accuracy of predictions. Improved predictive capabilities would also help enhance the business' agility. Additionally, the client wanted to gather insights on metrics that would help them understand the relationship between the amount of the drug that was manufactured, the amount prescribed, and the amount consumed.

The challenge
Focusing on building stronger bonds with best customers.

The solution
A big data analytics engagement.

The result
Enhanced customer experience and devised risk management strategies.

The Solution and the Business Impact

With the help of Quantzig's big data analytics engagement, the pharmaceutical industry client improved their ability to measure and monitor whether medications are being used as prescribed. The client also analyzed the number of drugs manufactured against supply data and market demand data, and the effect of drug counterfeiting on their overall business. Furthermore, the client was able to better understand the effectiveness of drugs by monitoring social media sentiment.

Big Data Analytics Predictive Insights

Pharmaceutical industry firms can make use of big data analytics to innovative products, enhance customer experience, and devise robust risk management strategies to help them make informed business decisions and improve their competitive position in the market. Companies can also leverage big data analytics to decrease inventory write-downs and improve margins as volume increases.