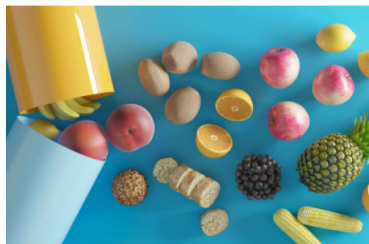


CASE STUDY

Data Mining Engagement for a Traditional Chinese Medicine Company Helps Identify Anomalies in Datasets



What the Client Wanted

Leverage data mining techniques to predict future outcomes by identifying incongruities, data correlations, and patterns within huge sets of data in the traditional Chinese medicine segment.

The Outcome

A leading traditional Chinese medicine (TCM) manufacturing firm, wanted to help their patients achieve and maintain health by developing precise remedies to tackle their health issues. The staggering amount of unstructured data related to lifestyle disorders and other chronic diseases posed major challenges that hampered their R&D process.

To unearth insights using the right data mining techniques, the traditional Chinese medicine manufacturing firm approached Quantzig to leverage its expertise and devise appropriate solutions to help their customers.

Traditional Chinese Medicine Market Overview

Traditional Chinese medicine is an ancient field of medicine based on the principles of Daoism, which states that everything in the universe is interrelated. Thousands of years of observation and practice resulted in the development of traditional Chinese medicine, which follows a unique strategy to understand the functions of internal organs and physiological processes. Traditional Chinese medicine is a very complex and complicated field of the medical system that aims at promoting health through diet and exercise. It also focuses on treating illnesses using herbs, acupuncture, and Qigong.

Challenges facing the Traditional Chinese Medicine Market

- **Authentication issues:** Traditional Chinese Medicine (TCM) is winning supporters across the world, which makes it necessary for players in this field to validate the safety and quality of their medicinal products. A proper authentication process along with the use of data mining techniques can help ensure that the products are safe from contaminants. However, the recently formed Chinese Medicine Association of Suppliers (CMAS) in the UK plays a key role in authentication.
- **Difficulty in creating an appropriate placebo:** A major challenge for traditional Chinese medicine practitioners revolves around the difficulty in developing appropriate placebos for multiple-herb based decoctions. This is because it is technically challenging to produce an indistinguishable placebo in the form of decoction for a multiple-herb formulation.

About the Client

One of the largest [manufacturers of premium traditional Chinese medicine](#). The client is a global leader in scientific research and production of Chinese Granule Herbs, with their sales network spread across 30 countries globally.

Client's Challenge

Owing to the challenges they faced in drug discovery, the client wanted to implement efficient data mining techniques to discover data patterns that help improve the quality of drug discovery and drug delivery methods. The traditional Chinese medicine firm wanted to sift through the repetitive noise in their data to gain an understanding and make use of relevant factors and assess likely outcomes.

Business Impact

Implementation of [data mining](#) techniques helped the traditional Chinese medicine manufacturer to build a successful predictive model to predict future outcomes of their medicinal formulations. It also helped them find answers to essential analytical questions such as – Which formulations are likely to be retained? How to ensure effectiveness and efficiency with optimal resource allocation? What factors affect the drug discovery process?

Insights on Data Mining Techniques

Organizations today have access to huge volumes of information that is gathered from all kinds of sources across the industry. However, the unanswered question here is – How can you use this data to generate insights that are required to drive business value? This is where 'Data Mining Techniques' contribute in a big way. Data mining techniques play a key role in helping organizations predict future trends and act accordingly to carve out a niche for themselves in the market.