

# **Data Mining**

Get the data you need when you need it

# **Impact** of Data Mining

Data driven organizations have a significant competitive advantage over their competitors. Many times, the data that has the greatest impact on a business is already available online from governments, agencies, and non-profits. The traditional methods to pull this data involve lengthy research projects and manual data management leading to outdated and inaccurate datasets. There is a better way to pull this data, and it involves using automation and application programming interfaces (APIs) for **fast and accurate extraction and delivery**. Some of the ways this is advantageous for businesses are:

- Reduction of man-hours
- Improvement of data quality and accuracy
- · Faster response to shifts in the data

# Why Choose Us

At Analytics Bound we have developed several tools and techniques for pulling data from online sources, regardless of whether these sources have APIs or not. Additionally, our team of experts are knowledgeable in database architecture and development. Our tools have been utilized by organizations large and small to pull data quickly and accurately resulting in cost savings and time savings.

#### **Main** Services



# Web Scraping

Automate data processing from online resources to create datasets that can be used in your business



# **API Management**

Assist you with pulling data using APIs (application programming interface) as well as managing any APIs related to your datasets



## **Database Setup**

Set up databases to store the mined data for easy consumption later



#### **Maintenance**

Troubleshoot issues that arise when pulling the data or managing the database so that you can get back to work quickly

#### **Our Process**

Our data mining projects consist of five stages, which include requirements gathering, solution design, solution development, testing, and deployment. Here is a high-level overview of these stages:

#### Working with our client, required data points and sources are identified. Once outlined we work to de-Requirements termine how they want to be able to work with and consume this data. Once identified, the raw data is then prepared and **Data Prep** transformed in order to get it ready for processing and analysis. Algorithms and models are constructed to pull the Modeling data and metadata, if needed. After the model has been developed, it is thoroughly **Evaulation** tested and evaluated to ensure it is working as expected and meeting the needs of the client. When the model is ready, it is deployed to begin scrap-Deployment ing and pulling all the data requested by the client.

### **Add-on** Services

Once a Data Mining solution has been implemented, we offer services to enhance and maintain the solution, such as the following:

## **Maintenance**

When data sources change, you may need to update your data mining solutions so they continue to operate as expected. We are able to reengineer the solutions we have built to keep them in working order when necessary. It is also important to update and enhance data mining solutions so they remain relevant to the business, and continue to drive value.

# **Reporting & Analytics**

Once you have the data you need, you have to make sense of that data. That is where our reporting and analytics services come into play. Our team of experts will work with you and your team to build out professional solutions to analyze your data.

Contact us today for more information and pricing.

# Case Study

We recently worked with a real estate company that needed to obtain property data from a county website. Prior to our involvement, the organization would have to manually enter each property into a web form and manually pull the search results into Excel. With our set of tools and techniques, they are able to **pull thousands of records in minutes rather than hours**. With these tools at their disposal, they are able to execute on their business objectives before their competition and with fewer resources necessary.

Once we started pulling the data, we took our solution to the next level. First, we stored this data in a database. This is a far better and safer solution to storing the data that was mined rather than storing the data in a spreadsheet.

After the data was written to a database, we developed a Power BI report that pulled the data from the database and presented it in a manner that was more conducive to business decision making. This report also provided an interactive map of the properties that were analyzed.

With these additional enhancements in place, it opened up opportunities that were previously not available to the company. They were able to more efficiently and effectively analyze hundreds of thousands of property records. With this processing capability they were able to expand the areas that they worked.