

# Fraud Detection and Prevention

## Industries

- > Insurance

## Key Benefits

- > Insurers can now spend the majority of their time analyzing the data instead of wrangling it
- > New insights lead to new business rules that identify fraudulent schemes before they unfold
- > Larger swaths of data across all product lines can be accessed allowing for more thorough analysis
- > Previously neglected data, like the unstructured adjustor notes, can now be interrogated to gain a clearer picture of fraudulent activity

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## Solution Overview

According to the FBI, the total cost of insurance fraud is estimated to be more than \$40 billion per year. Identifying suspicious filings—those that have been submitted too frequently, with unexpected amounts, or by suspicious medical practices—results in immediate savings. Uncovering new patterns or tactics allows insurers to flag suspicious practices proactively, dismantling fraudulent schemes before they start.

Data discovery provides insurers with the visibility across claims, billing, and 3rd party sources needed in order to detect fraud. An ad hoc exploratory experience paired with full-featured search capabilities allows insurers a way to quickly derive insights while maximizing the value of both structured and unstructured sources. Exposing these data sources through a discovery platform enables users to hone in on fraudulent activity in a fraction of the time that it takes with traditional spreadsheet-based approaches, and it limits occurrences of undetected fraud.

## Business Challenges

- > Tremendous amount of time is spent wrangling data across unrelated sources into spreadsheets
- > Variations in the data (e.g. different representations of a provider or patient's name) make it difficult to correlate disjointed datasets and tease out insights
- > Spreadsheet-based approaches make it difficult to look at large swaths of data where more significant fraudulent patterns may exist
- > Difficulty tapping unstructured free-form text fields such as adjustor notes or descriptions for insight

## Potential Data Sources

- > Line items from medical payments
- > Claims
- > 3rd party data (e.g. CMS' national provider identifier records, including those deactivated for suspected fraud)
- > Adjustor notes
- > Electronic medical records
- > Internal diagnosis and bill codes

## Key Features

- > Smart, automatic data profiling
- > Built-in transformation capabilities
- > Modern visualizations
- > Fully integrated with the most robust Hadoop distributions on the market
- > Explore and profile all datasets in the Hadoop data lake

## Key Benefits

- > Allow analysts to fail fast in their data analysis pursuits
- > Transform and enrich massive datasets quickly
- > Spend time & resources on analytics and insight instead of data prep
- > Include business analysts on the team to help drive collaborative discovery
- > Process data in place in Hadoop, substantially reducing data movement and management costs

## Other Alithya Services

- > Extend your environment with Alithya's additional services:
- > Advisory services help define the priority key metrics and supporting data to include in the solution
- > Custom training provides users with knowledge needed to use the tools
- > Additional metrics and data extend the solution
- > Managed Cloud helps to reduce IT costs and resources needed

## About Big Data Discovery (BDD)

Oracle's answer to demystifying the modern data lake, Oracle Big Data Discovery (BDD) harnesses the distributed computing and storage power of Hadoop and adds an interactive layer through which users can easily explore all of their data. Oracle BDD wraps data analysis, transformation, and discovery tools together into a single user interface, and it comes with advanced features such as smart, automatic data profiling, built-in transformation capabilities, modern visualizations, and solid integration with Hadoop.

Big Data Discovery provides business users the ability to understand insights in their data by providing visibility into these critical data sources, uniting these sources and providing the user the ability to understand correlations in the data. By providing further insight into this data, companies can make better informed decisions, improve their business processes and transform their business.

Alithya is especially equipped to help customers prove out potential use cases of BDD as well as architect and build out implementations of the product. We can work with you on all aspects of implementing BDD from proof of concepts, planning to full life-cycle implementations.

Oracle Big Data Discovery (BDD) helps organizations quickly explore all relevant data.

- > Combine structured & unstructured data from disparate systems
- > Automatically organize information for transformation, search, discovery & analysis
- > Rapidly assemble and share easy to use analysis projects that anyone can use
- > Connect to all your data including unstructured and non-normalized data from your Hadoop infrastructure
- > Provides interactive analytics with in-memory enabled performance

## Advantages of Big Data Discovery

- > Find insights in your data as never before by putting the power of analytics into the business users' hands
- > Find answers to questions that your business has not been able to answer
- > Quickly combine data without having to go through costly normalization when building data warehouses
- > Complete Enterprise solution that is integrated with Hadoop to leverage your IT investment and provide a solution that can be managed centrally

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## Contact Us

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