

# Insurance Company Leverages Automated Web Data Collection And Data Analytics To Personalize Package Selection

## Objective

To develop a recommendation system for B2B companies, leveraging unique data sets to provide customers with an essential business service to select personalized insurance packages.

## Challenge

A US-based Commercial Liability Insurance Company developed an MVP for an ML-powered recommendation solution for small and medium-sized businesses (SMB).

The system would allow customers to choose the insurance package quicker and more accurately.

To build the system, the client needed reliable data sets from the industry, which were enablers to prospective ML solution. The data sets were not readily available and needed to be collected from scratch.

## Quick Facts

- ✓ 1M Web Sites Analyzed
- ✓ 451K Records Delivered
- ✓ 12 Mins for Insurance Package Definition

The Client was looking for a reliable partner and tasked Intetetics with the full range of services for collection and aggregation featuring:

- . Process Set Up
- . Research and Analysis of Data Sources
- . Data Collection
- . Verification and Cleansing

# Solution

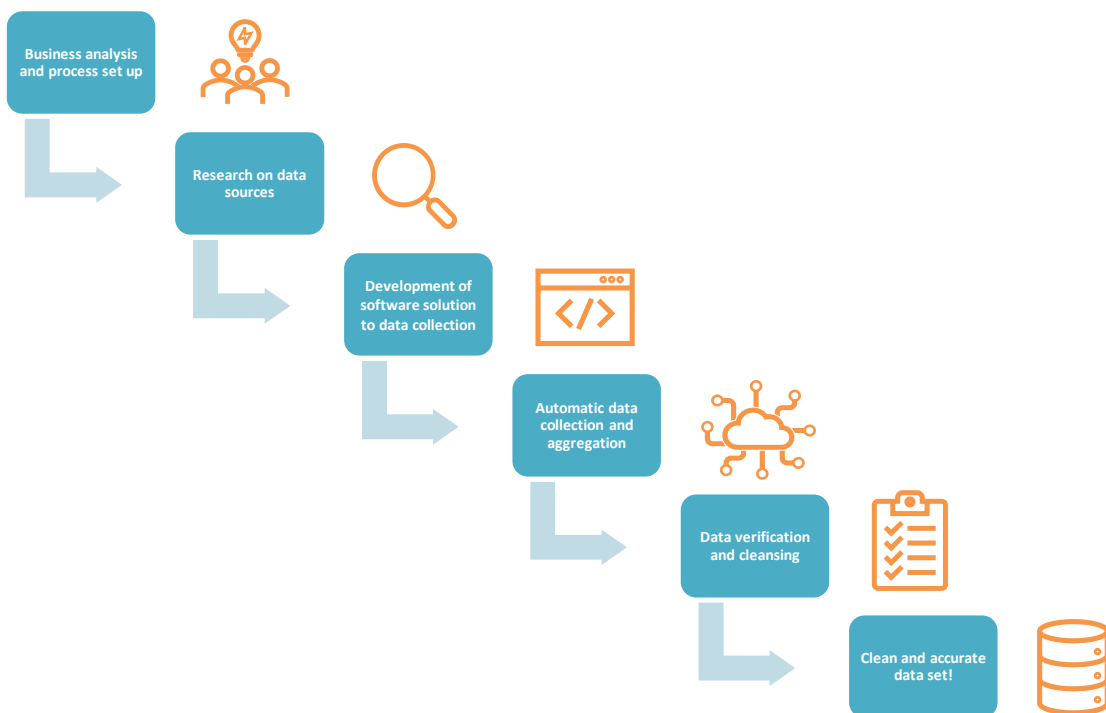
Intetics initiated a hybrid approach of automated program solution and manual verification of data. An Offshore Dedicated Team® was set up, comprising of process analyst, research analyst and a database engineer.

The automated program analyzed over 1 million web sites, applying specific attributes and parsing the collected data. A data researcher and data analyst then verified and performed data cleansing to create accurate and comprehensive data set.

With a target range of 25,000 – 50,000 rows of data per data set, to get initial models trained, Intetics team delivered the first data set consisting of 27,000 records. This enabled the Client to build an ML-powered solution from scratch. The Client was able to leverage two more data sets of 233,000 and 191,000 records, and subsequently, Intetics consistently delivered over 100,000 rows of data per data set.

The Client's Machine Learning engineers continue to work with the model and data sets, acknowledging that the data is maintaining its quality and integrity.

## Process scheme (accomplished by Intetics)



**Technology Stack used:** C#, sql, Selenium, HTML Agility Pack.

## Client's reference



*Their willingness as individuals to really latch on to what we were doing and build a bond was impressive.*

### Results and Benefits

- ★ The client is using the data set to develop the personalized recommendation system for commercial liability insurance.
- ★ Intetics' tailored approach helped the Client reduce costs and timeline for subsequent data sets, exceeding targets, consistently delivering over 100,000 rows per data set. Achieving the milestone of one production-ready data set per month.
- ★ The quality of delivered data sets met and exceeded expectations thanks to a unique sequence of automated and manual checks.