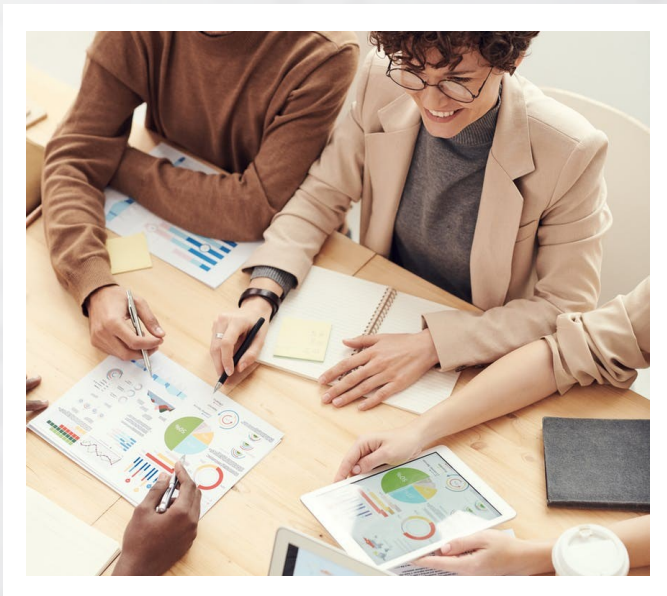# Insurance Service Provider Leverages Predictive Analytics To Reduce Policy Cancellation Risks

Client Background

Our Client is one of the top New York based insurance companies with a broad portfolio of group benefits in dental, vision, hospital cash, medical gap, etc.

Challenges

Our Insurance client was facing the challenge of **untimely policy cancellations** that had a direct impact on their annual revenues. Predicting policy cancellations was important to focus on rebuilding relationships with clients and develop a business plan with a uniform growth revenue model.

Being in the insurance domain for over two decades, they gathered a huge database of policyholders that includes demographic characteristics such as policy location, the insurers' gender, policy age, and past cancellation counts.

They had a huge data base but no tool or platform to leverage it and convert to useful insights. They wanted to use the power of **data analytics to leverage this goldmine of data insights** to reduce their policy cancellation rate.

Solutions

Looking at the clients' requirements, Beyond Key developed an artificial intelligence powered solutions that utilized a **machine-learning algorithm** to perform **predictive analytics.**

We developed a platform which gave them capability to identify customers who require special attention because they were more likely to cancel or lower their coverage. More advanced data Insights could help identify unhappy customers.

How It Works

We developed an **Azure-based machine learning platform** for the client which was trained to read and analyze the **past 10 years of data**.

While analyzing historic customer data, we identified various attributes within the data sets that have a direct correlation to Policy cancellation rates.

Our developers not only created combinations **of attributes** but also identified various **permutations and combinations of these attributes** which lead to cancellation prediction rate scoring.

The application was capable of **predicting the cancellation rates for single policy** as well as **multiple policies** using the excel import function.

Results

Having this knowledge helped the client stay ahead of the game, so they could reach out and provide personalized attention to potential cancels.

They were able to retain their old customers who were deciding to go with competitor products.

Screenshot

Policy check

Policy Prediction 1.6   Policy Prediction 1.5   Policy Prediction 1.4   Policy Prediction 1.3   Policy Prediction 1.2   Policy Prediction 1.1   Policy Prediction 1.0

Individual Policy :

P-No

Broker

P-Zip

Female Per

Age Of Policy

Industry Code

Cancel Count

Benefit Level

Claim Exist

Live Count

Predict Policy

Batch Mode :

Upload csv/excel file   Sample file

Browse...   Demo Records.csv

Upload

Export to Excel

Show 10 ⌄ entries

Search:

Policy No ▲	Broker ⇕	Zipcode ⇕	Female Per ⇕	Age of Policy ⇕	Industry Code ⇕	Cancel Count ⇕	benlevel ⇕	claim exist ⇕	LiveCount Category ⇕	Label with 0.5 Threashold ⇕	Scored Probabilities ⇕
D112296	0000-8835	11106	0	23	0	2	2	0	1	Canceled	46.2%
D112526	0000-1237	11367	0	23	5944	6	1.5	0	1	Active	76.49%
D112591	0000-6791	12065	100	23	7349	1	1.15	0	1	Canceled	46.73%