# algoscale

# BUILT AN INTELLIGENT RECOMMENDATION ENGINE FOR AN INSURANCE MULTILINE PLATFORM

Learn how Algoscale assisted the client to build an intelligent recommendation engine solution to recommend the best-suited Insurance products to the customer.

# **Industry Challenges** +

Traditional recommendation systems, which are created for online platforms (e.g., e-commerce, entertainment), are built on large datasets and try to advise the next best offer, however, insurance products have unique characteristics that necessitate a different approach. As insurance products often offer a range of alternatives and a befuddling terminology, even seasoned consumers, let alone first-time buyers, good recommendations have become especially relevant in the domain.



#### **Accuracy**

As the amount of data available grows, a new challenge arises: consumers face difficulty deciding which objects actually they want to see.



#### **Approach**

Finding the right algorithms and the right approach is crucial when it comes to recommendations as it impacts the quality of the predictions.



#### **Analysis**

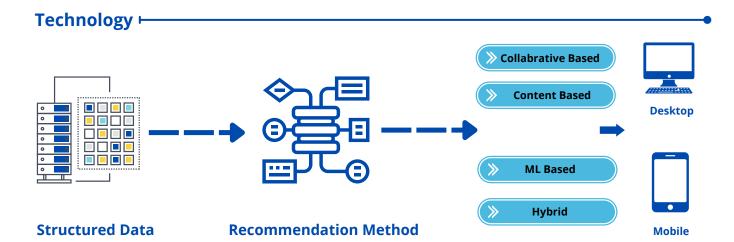
The solution should first be able to guide the user through the awareness and analysis steps before final decision making.

#### Problem Statement +

The client wanted to build an intelligent Recommendation Engine to bolster customer retention and harness digital transformation for the Insurance domain. The recommendation engine needed to emulate a salesperson that can guide customers through the stages of awareness, research, and decision making.

#### Our Solution +

- Algoscale followed the user-clustering approach for recommendations to enhance the accuracy of recommendation results based on data collected through questionnaires and demographic data.
- To filter and add additional recommendations, we used a similarity matrix based on the policies in the vault, their categories and subcategories, and other various policy data provided by different insurance providers.
- Our experts decided on a hybrid strategy that would include both content and collaborative filtering. We built the recommendation pipeline and set up the APIs, and once the outputs began to come from the recommendation engine generated locally, we moved on to its optimization.



#### Tech Stack +











## **Business Impact** ⊢

- Our experts provided the client with a complete solution capable of performing highlevel functions such as finding integration touchpoints and strategies for data collection, as well as recognizing the elements that influence the decision to purchase insurance.
- Algoscale studied crucial product attributes and user behavior characteristics
- To obtain user information from the mobile application backend, our solution enabled API integration or Database View access.

### Case Study: Built an Intelligent Recommendation Engine for an Insurance Multiline Platform



#### Client

Based in Delhi, the client provides an apponly platform that bridges the gap between all insurance stakeholders and helps its customer manage and track their multiple insurance policies.



The client was looking for an intelligent recommendation engine to be used as a tool to improve customer retention and harness digital change in the insurance industry.

#### **Our solution**

Algoscale developed an intelligent recommendation engine solution with the purpose of recommending the best-suited insurance products to customers based on multiple factors such as the user's demographic information, previously purchased insurance products and services, and others.

# **Business Impact**

The recommendation engine solution designed by Algoscale emulates a salesperson that can guide customers through the stages of awareness, research, and decision making.

# WE DATA