

# Underwriting Expansion in Sub Prime Space

## Background & Challenges

- Client was facing revenue pressure and thus wanted to expand underwriting space within specified risk appetite by targeting consumer in sub prime space
- Client tried rule-based approach however, it could not identify low risk segment for approval

## Objectives

- Objective was to identify a low-risk segment with similar behavior as compared to existing BAU population

## Approach

### Target Population

- Considered overall responder universe for segmentation
- Excluded responders with high-risk behaviours like derogatory records/ historical delinquencies/ new to credit etc.
- Tri-Party Bureau and Application data was used for model development

### Segment Identification

- Developed machine learning model (XGBoost) to identify good responders within client risk appetite
- Business judgement overlay on identified population to further mitigate the risk
- Assessed key P&L metrics to ensure sufficient bookings with substantial account revenue growth

### Risk Monitoring

- Developed framework for monitoring sub-prime population
  - BAU and Test performance monitoring
  - Success metrics and criteria for decision reversal

## Key Results

**~5%** growth in portfolio in a year of implementing expansion program

Risk profiles of expansion segment were almost similar to that of existing underwriting segment

## About Straive

As a data analytics and AI operationalization company, we don't just build top-tier data analytics and AI solutions—we integrate them seamlessly into your core workflows. This approach drives enhanced efficiency, improves user experience, and boosts revenue, setting you apart from the competition.

Serving a diverse range of industries—including Pharmaceutical & Life Sciences, Logistics, Supply Chain & Manufacturing, Research & Publishing, Information Services, EdTech, Banking & Financial services, and Retail Tech, Entertainment & Media—we have a global client base spanning over 30 countries.

Our strategically positioned resource pool operates across seven countries, including the Philippines, India, the United States, Nicaragua, Vietnam, the United Kingdom, and Singapore, where the company is headquartered.