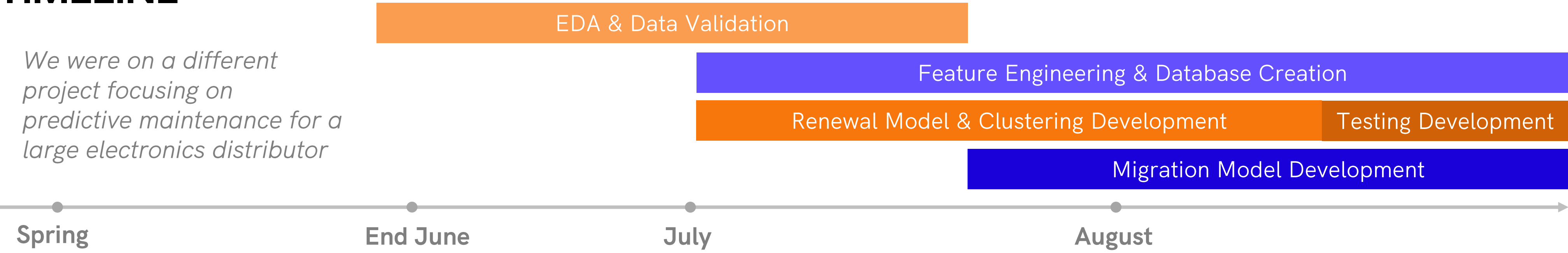


Customer Retention & Targeted Recommendations

CLIENT & SCOPE

We spent our summer with BCG GAMMA as part of a larger analytics and consulting team for a **direct seller** based in China. The scope was to develop a suite of predictive and prescriptive tools to help **reduce customer churn and promote customer advancement**, delivering these insights straight to the customer's hand through their smartphone apps.

TIMELINE



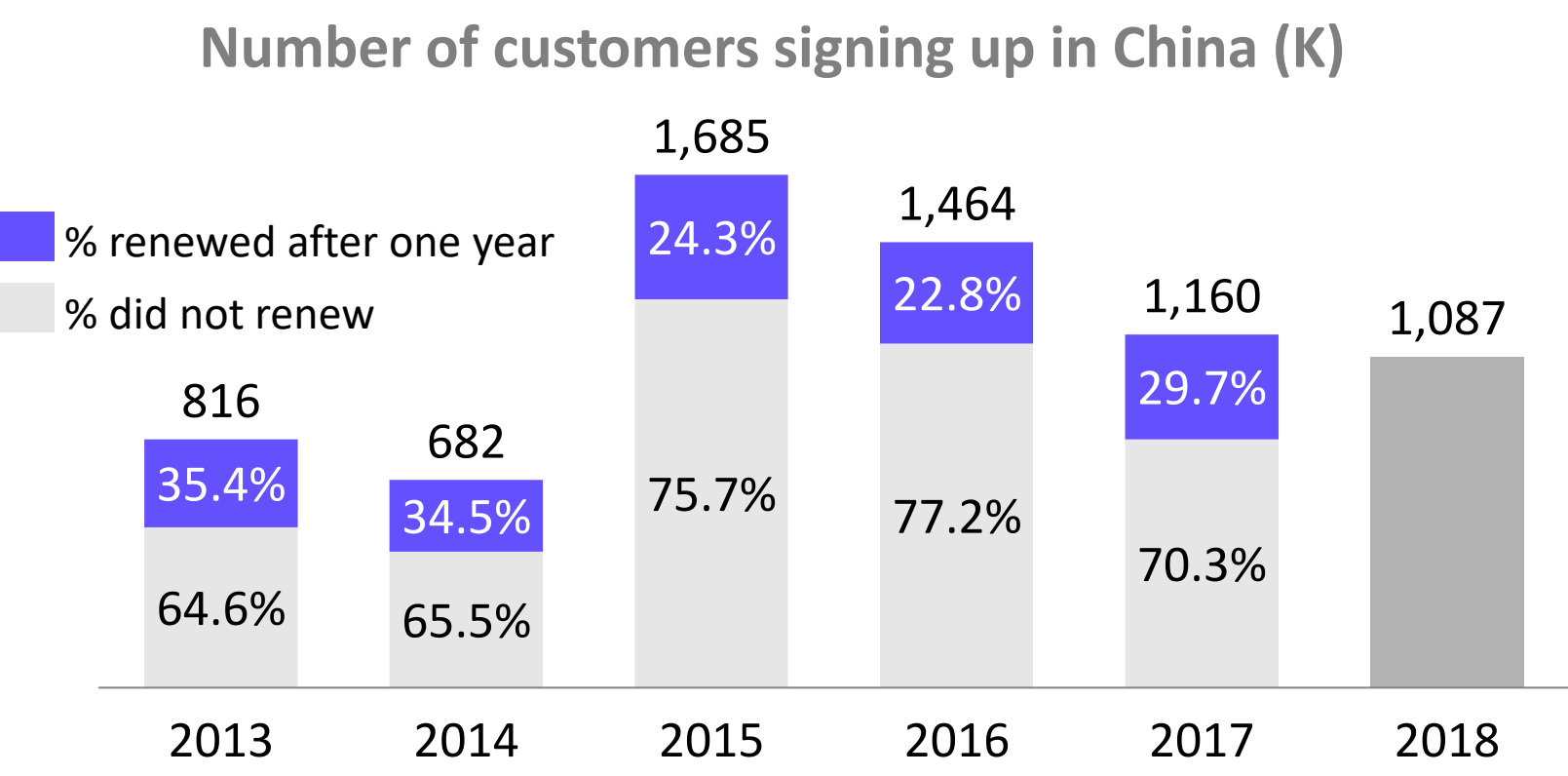
PROJECT PIPELINE & METHODOLOGY



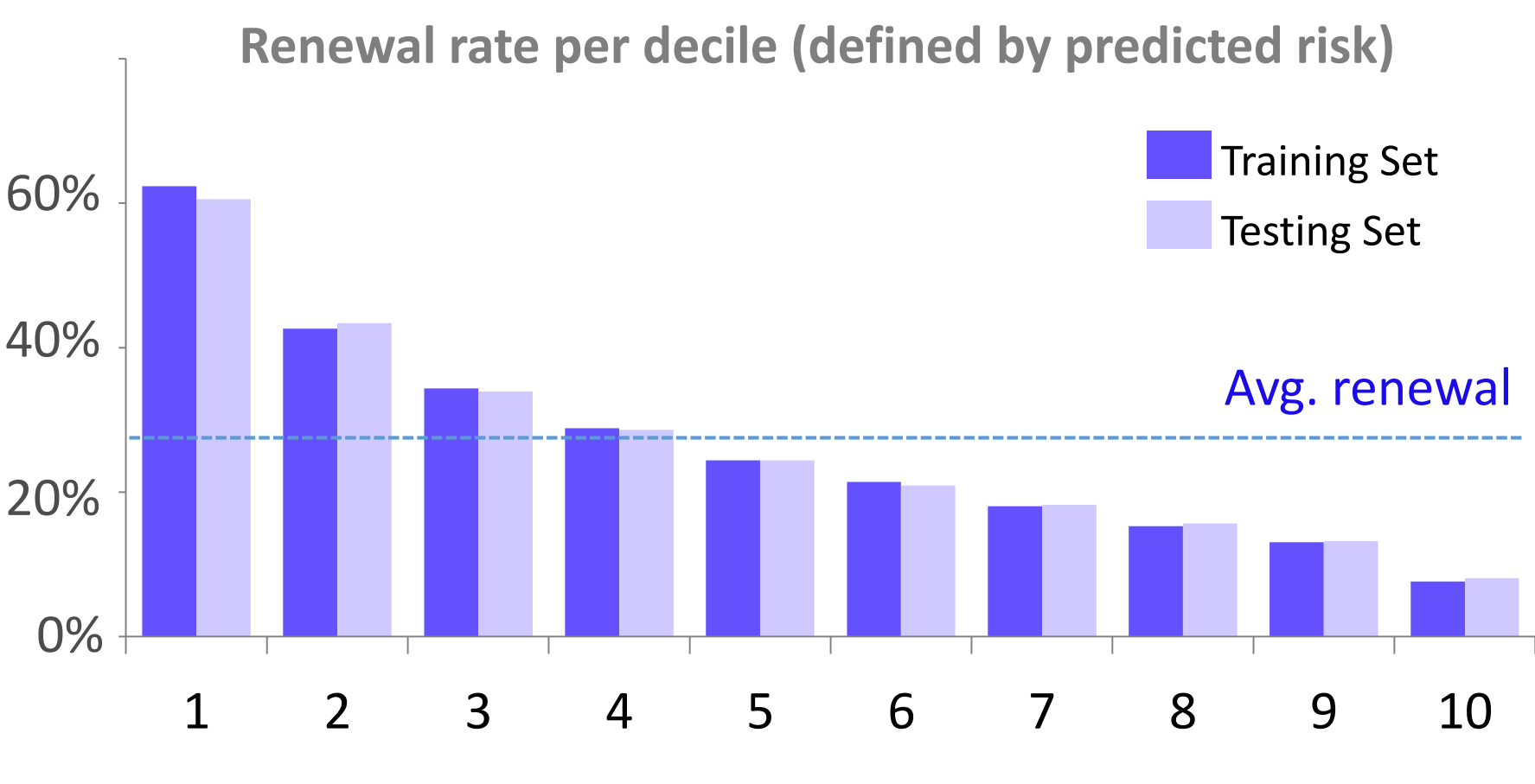
Main dataset spans 7 years and includes **>438 million** monthly records, >275 variables and >17 million customers

Consolidated multiple databases and created additional features such as time-based aggregate performance, relative behaviors to others in the same cohort, producing **>600 variables**

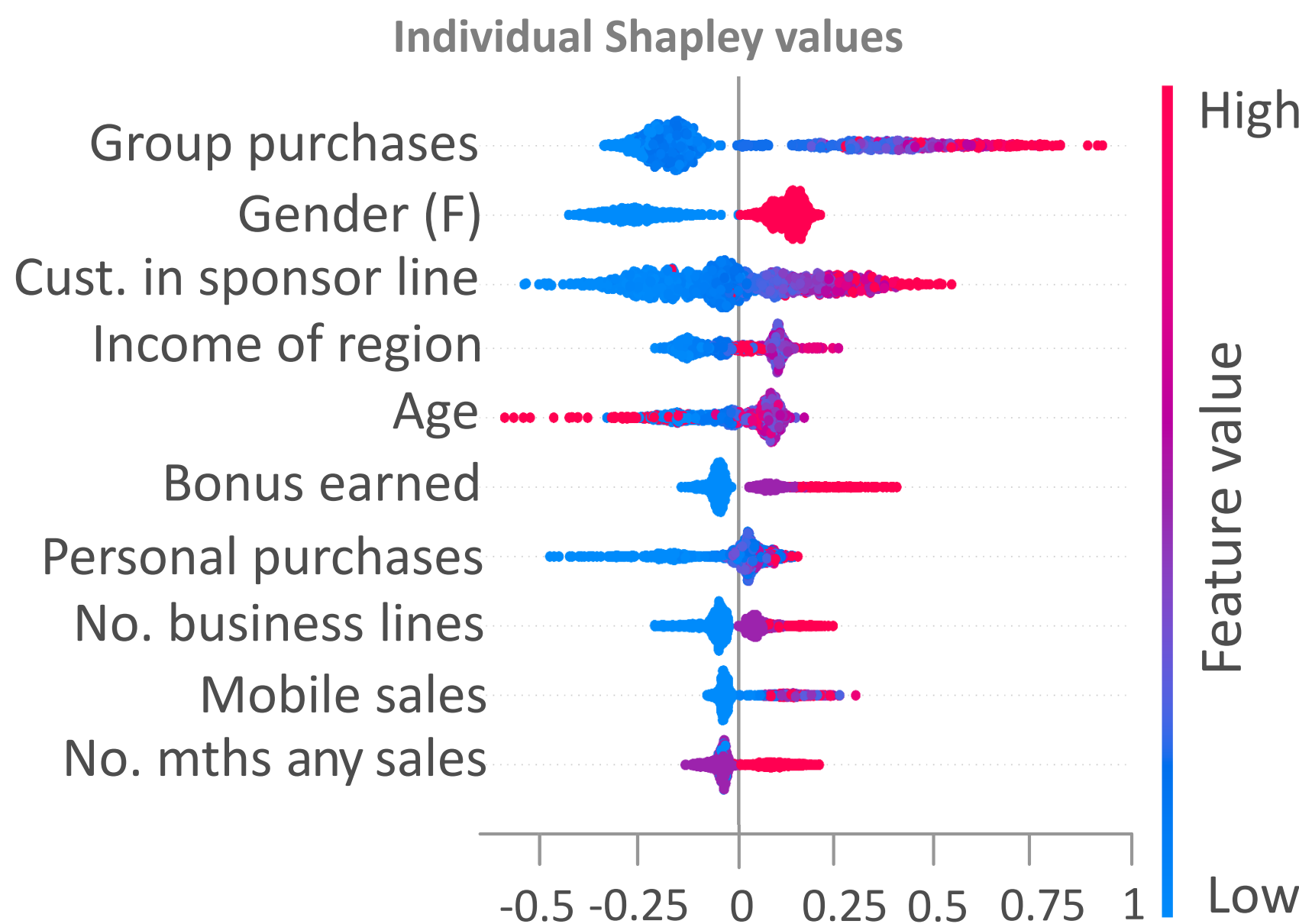
Renewal rates have been declining, motivating a model that helps reduce customer churn



Tree-based models (XGBoost) produce predicted scores allow us to target segments of the at-risk population more effectively



Unlike traditional feature importance, Shapley values are generated for each prediction, allowing greater explainability to a client unfamiliar with analytics, and provides useful prescriptive tools.



NEXT STEPS

We rolled off the project while it was still in development. Some key next steps that have been planned include **testing of recommendation effectiveness**, **analytics capability building** and a **management dashboard** for the client to keep track of these trends, predictions and actions.



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