BACKGROUND

Advances in technology, coupled with the growth of access to massive amounts of data and information, have led to the rise of the empowered consumer. Companies understand the importance of becoming more customer-centric and creating effective customer experiences across all their marketing and communication channels. Doing so helps companies to understand and anticipate customer needs while also driving customer retention and profitability.

CHALLENGE

A leading financial services and insurance company we call FSI wants to understand the current financial states and goals of its individual members and anticipate each customer’s important life events, preferences, and readiness for different financial products and services. FSI uses several digital channels such as Web and mobile to engage with its members, which is information it can leverage to understand customer preferences across each channel. The company also has a multi-product structure and six lines of business with over 700 products. This company principally uses a rule- and model-based system that segments its multi-million-member population into 16 categories according to certain demographics and other relevant parameters.

This traditional segmentation or clustering approach is very limiting in that each customer's financial health journey is broadly categorized and lacks details about that individual's specific circumstances. Therefore, FSI's goal is to move beyond its traditional segmentation and personalize the customer experience for each of its millions of members by having up-to-date knowledge and actionable insights about each individual member. FSI wants to anticipate and serve its customers with the right service or product in the right channel and at the right time.

SOLUTION

Saffron ingested and analyzed five years of data based on several hundred thousand members that was representative of the company’s multi-million customer population. Of the available 700+ products, Saffron learned what choices each member made about individual products over a five-year time span. Unlike traditional rules and population-based models, Saffron created high-dimensional “signatures” (weighted customer profiles) from the three selected data sources: (1) member demographics, (2) product portfolio, and (3) channel preferences to anticipate a customer’s next best action.

Based on Saffron's unique 'similarity analysis' (who is similar to who) approach, at the individual product and customer level, Saffron was able to generate rank-ordered product recommendations based on our anticipation of what the member would likely purchase next. Saffron further provided the supporting, explanatory evidence for each recommendation – showing the reasoning behind each recommendation.

RESULTS

FSI has a 5-tier product structure. Several major lines of business represent different financial products and services at Tier 1. Under the major lines of business, FSI has 22 lines of business product families (Tier 2), which is where FSI performs the majority of its analytics. Tier 5 represents the product SKU level and therefore includes the most products.

Beginning at the individual product and member level, Saffron demonstrated high accuracy at anticipating a member's next product acquisition across the
Saffron consistently had high high accuracy rates for recommending the correct products across the five tiers. Moreover, Saffron accomplished these results in a 10-week pilot, in contrast to traditional modeling efforts that took over 18 months.

### WHY Saffron

**Unprecedented Accuracy**
Saffron provides our customers with the highest degree of data accuracy – the proof is in our results.

**Full Transparency**
Saffron gives our customers the explanation and reasoning behind the results of their data.

**Learns on Sparse Data**
Saffron learns on sparse data so you don’t need volumes of data to get started.

**Time-to-value**
Saffron's customers can rapidly unlock value in their data (i.e. weeks rather than months).

**Speed-to-insight**
Saffron provides our customers faster speed-to-insight to quickly see the actionable knowledge in their data.

**Model-free and rule-free**
Saffron is dynamic and not constrained by rules and models - incrementally learns and adapts in real-time from incoming data and human feedback.

**High ROI**
Saffron has a proven track record of high ROI for leading enterprises across industries and use cases.

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### ABOUT Saffron

Saffron's Natural Intelligence Platform combines the power of computing with human-like intelligence to quickly make sense of your data and provide organizations with actionable knowledge to aid in decision making. Our model and rule free platform learns, reasons, remembers and adapts in real-time, ingesting data from disparate sources (structured and unstructured), to find new patterns and reveal previously undetected knowledge. Saffron's cognitive analytics platform has been applied to solve complex business problems across a wide range of industries from manufacturing, financial services, energy, healthcare and government. Saffron was acquired by Intel in October 2015 and is part of the New Technology Group. For more information on our technology and solutions visit us at [www.saffrontech.com](http://www.saffrontech.com).

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<table>
<thead>
<tr>
<th>Tier Level (FSI company’s 5-part product structure)</th>
<th>Approximate Number of Products in each Tier</th>
<th>Average # of Recommended Products to each Member</th>
<th>Predictive Performance (Recall) based on Random Selection</th>
<th>Saffron Predictive Performance (Recall) based on Random Selection</th>
<th>Saffron Predictive Performance (Recall) based on member demographics, product portfolio, and channel preferences</th>
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<tbody>
<tr>
<td>1</td>
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