Propensity Modelling at Pivotal iQ

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A Data Science Foundation White Paper

April 2018

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www.datascience.foundation

Pivotal iQ Background

Pivotal iQ is a company that provides deep sourcing intelligence for their ICT clients to understand the industry's supply and purchasing activities and emerging customer opportunities. Whereas the first area of the company's expertise focuses on understanding the supply side of the equation, the latter explores the ways to broaden the customer base and retain customers. In particular, various tools offered by Pivotal iQ help companies better understand their customers through learning their spending patterns, budget position, and preferences. However, what technology does Pivotal IQ use to achieve such result? The answer is simple – *Propensity Modelling*.

What is Propensity Modelling?

In a nutshell, Propensity Modelling (PM) is a set of statistical techniques that analyze similarities and differences among current and potential customers by studying their behavior, social, cultural, and economic backgrounds, past purchasing activities and interactions with the platform or product. The list of customer features may be further extended depending on the type of a product or service the company offers. The power of PM rests on its ability to identify potential customers by finding traits they share with existing ones. Being able to identify customers without actually reaching them with random trials and test marketing campaigns is a huge timesaver and cost reduction opportunity for companies.

Propensity Modelling (PM) is nothing new, however. It was proposed in 1983 by Paul Rosenbaum and Donald Rubin and since then paved its way to healthcare, marketing, education, and economics. Pivotal iQ, however, introduces a new generation of PM where it's coupled with Big Data, ML-powered predictive models, and state-of-the-art SaaS tools and interfaces that simplify processing and management of data and instantly turning it into actionable insights to open new customer opportunities.

Implementation of Propensity Modelling at Pivotal iQ

Creating a good propensity model is not a trivial task. Our ability to predict consumer propensity to buy depends on the customer data available which entails two types of challenges for PM implementors. The first challenge is *quality*. Many companies fail to recognize customer opportunities because they possess bad data with a lot of missing fields, poor data entries, duplicates, or wrong format. To complicate things, customer data may be stored in multiple dispersed data silos in unstructured and hard to process form which makes it difficult to get insights from it. The second challenge is *quantity*. To run a model that will predict the consumers' propensity to buy and generalize to the real-world sample of customers, we need

multiple data points connected in a meaningful way. How Pivotal iQ ensures that it has enough good customer data to meet these criteria?

The solution is *Deep Data Dynamically Delivered* called *4D Data* at Pivotal iQ. Using the latest search technologies powered by intelligent algorithms, Pivotal iQ engines scan the web, offline resources, industry reports, and consumer-provided data to create huge deep datasets prepared for the most complex Propensity Modelling. The company's unique deep data approach ensures that the high-quality data in enough quantity is delivered and used in the Propensity Modelling.

The second step is training propensity models to generate accurate propensity scores that predict consumer behavior. Using state-of-the-art ML algorithms, Pivotal iQ constructs the models that can be plugged in the real-world user datasets to drive better marketing, sales, and PR campaigns and enhance UI/UX for your platform's users. Pivotal iQ propensity Modelling currently supports a number of PM use cases including:

- *Propensity to Buy* models which help identify customers willing to purchase and tailor incentives for others.
- *Propensity to Churn* model to identify and analyze at-risk customers
- *Propensity to Unsubscribe* models which look for customers who are on the verge of unsubscribing from your services or platform.

Many Pivotal iQ customers had a chance to witness the power of the company's Propensity Modelling. For example, one of the Pivotal iQ clients (Company X) urgently needed to target customers of its rival Oracle – the multinational computer technology corporation, headquartered in Redwood City, California. However, Company X's visibility in the market lacked depth, meaning it was unable to get its cloud computing offering through to Oracle's incumbent customer base. Using its data analytics tools, SpendView and InstalledView, Pivotal iQ not only enabled Company X to build an excellent propensity-to-buy list of Oracle customers but also flag the specific Oracle customers that were running legacy on-premise Oracle products spending at least £1m on ERP implementation in the next 12 months. These customers were ripe for Company X's rival cloud offerings. Company X confirmed it has "already generated many new opportunities using Pivotal iQ's IT intelligence with deal sizes ranging from £250K to £10M+" and recently closed its first deal from the campaign in less than 13 weeks open to close.

This case study illustrates that, if implemented correctly, Propensity Modelling can open new customer opportunities and increase profits. Pivotal iQ data analytics tools can find hidden opportunities in data by analyzing the products installed, past purchases and spending and turn these findings into actionable insights about potential customers and the best ways to tailor product offerings and market campaigns to them.

About the Data Science Foundation

The Data Science Foundation is a professional body representing the interests of the Data Science Industry. Its membership consists of suppliers who offer a range of big data analytical and technical services and companies and individuals with an interest in the commercial advantages that can be gained from big data. The organisation aims to raise the profile of this developing industry, to educate people about the benefits of knowledge based decision making and to encourage firms to start using big data techniques.

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