



Medical Device Targeting & Segmentation Case Study: Translating Machine Learning into business value

Overview

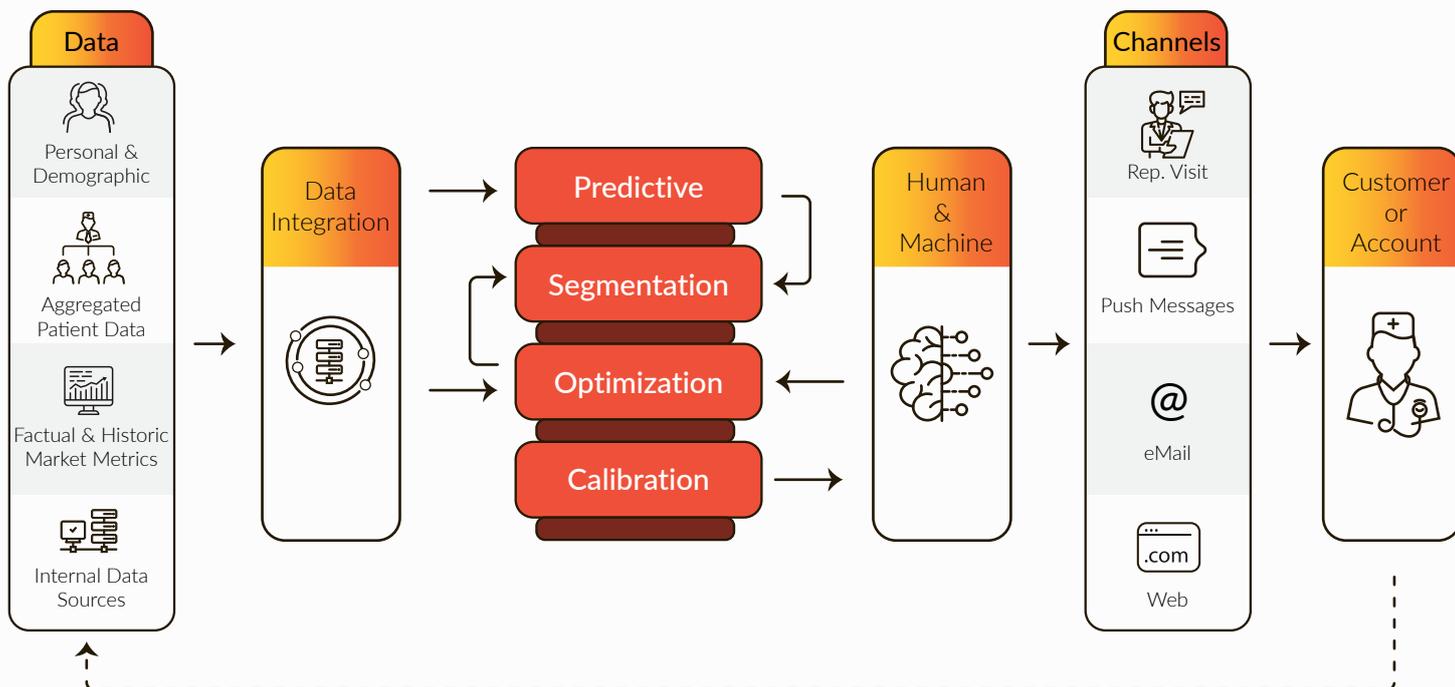
A leading provider in the US market of medical imaging devices, related disposable parts and consumable substances, wanted to streamline its operations to grow market share while increasing efficiency of the field and home office teams.

Brand management realized that their marketing and sales efforts are not focused enough on potential risk to lose accounts and **opportunities to win and grow accounts** and looked for a solution that will enable a proactive rather than reactive approach to market volatility.

The company was looking for an efficient data-driven, **AI/ML solution** that will enable insight-driven marketing and sales activities in a consolidated manner. They evaluated a number of advanced solutions, and selected Verix, which empowers the field sales team, brand professionals, and data scientists with a highly accurate and effective solution to pinpoint accounts of risk or opportunity.

The Verix solution is based on a **Customer Data Platform (CDP)** that enables the agility required to keep up with constant change.

Significantly boosting sales & improving efficiency by **15%**



The Need

Proactively address opportunities and risks to ensure growth



For years, the company has been using the traditional method of classifying accounts into 4-5 tiers for targeting and promotion, which seemed to be satisfactory. However, as the customer landscape is becoming more complex, segmentation and targeting have to change to keep pace. Periodical, coarse-grain targeting doesn't cut it anymore.

To be able to **better target the right accounts with the right message at the right time**, the company looked for a Targeting & Segmentation solution that will address their key requirements:

- **Dynamic** ability to generate T&S as often as needed and flexibly adjust lists for optimal results
- **Fostering collaboration** between Data Science and Brand Management
- **Scalable** to address additional brands and various devices and equipment, by changing market dynamics
- **Consistent** and accurate to ensure users' trust

As a first step, the company defined three key objectives – account classes to be addressed:

1. Consumable substances accounts that show signs of decrease in market share
2. Disposable parts and consumable substances accounts with potential to increase market share
3. Accounts with propensity to purchase new devices

The Challenge

Effectively applying data science to business needs



To improve account engagement and address their top objectives, **brand management needed to gain a detailed understanding of each account, which requires continuous fine-grain analysis of internal sales and marketing data along with competitive market data.**

The Data Science team used AI models to tackle the problem yet figured that using models that are tailored for a specific situation and become obsolete as the market continuously changes, would not be an effective solution. This 'one-and-done' method was neither sustainable nor scalable as they had to repeatedly, manually create new models.

The company realized they will need a CDP that enables continuous model development and automation. They required a solution that is CDP based, to provide an agile underlying platform that will enable a long-term, consolidated solution. A CDP ensures consistent assembling of data with the pertinent business logic, which otherwise would become a huge effort that consumes a lot of resources.



Verix solution

Better targeting to address key strategic goals



Verix is a three-tier solution:

1. **CDP** – a robust Customer Data Platform holding a rich set of predictive attributes about each account in the relevant therapeutic universe, with ML based micro-segments capabilities.
2. **Decision engine** - Predictive models – dedicated models address specific business needs
3. **Workflow studio** – allows users to build tailored workflows that integrate into day-to-day business processes

First, the CDP was implemented. All available data, internal sales and marketing data as well as competitive market data, has been integrated into a dedicated data-mart. **A repository of business rules has been added to calculate hundreds of attributes about each account in the relevant therapeutic universe. Machine-learning based technology provides fine-grain analysis of these attributes to add predictive measures.**

Brand managers can experiment with 'what-if' scenarios to generate micro-segments on the fly – the result of conjunction and unification of various selected aspects, which characterize accounts of strategic interest.

The company valued the fact that as a platform, the **CDP enables quick implementation and modification of AI/ML models with consistency and flexibility that can only be achieved in a solution based on an underlying platform.**

On top of the CDP, Verix added three predictive models to address the specific business questions defined as first step. The models identify significant accounts of risk or opportunity according to the KPIs in question.

Model results

High concentration of accounts with risk and opportunity

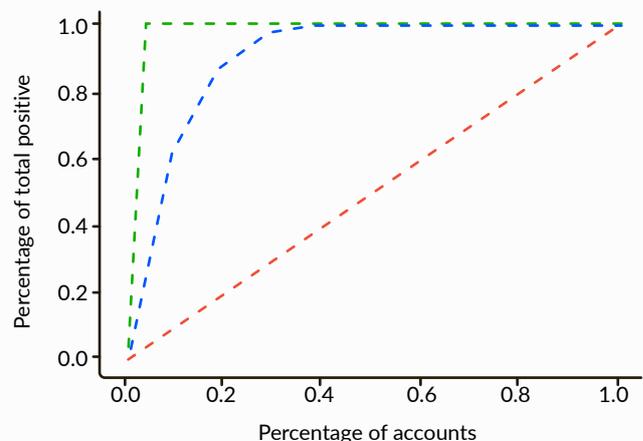


The Machine learning models analyzed the data and came up with results that enabled focused effort with highly prolific results to the company's sales. All three models showed predictive capabilities with high level of accuracy and helped the company better focus their marketing and sales efforts.

Looking at some specific examples, sheds light on the ability of such a dependable solution to call attention to the right accounts:

1. **Analysis of accounts at risks, accounts that show signs of decrease in consumable substances market share, found a high concentration of these accounts.**

The model pinpointed the total accounts that should be addressed with specific messaging to prevent churn. Apparently, addressing just 20% of accounts covers over 80% of accounts that showed signs of decrease in market share. This allows for highly focused marketing and sales effort to tackle the decrease in consumable substances market share.

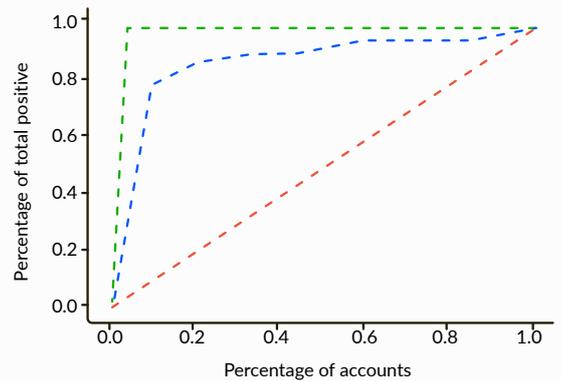


Gain Graph of consumable substances accounts that show signs of decrease in market share

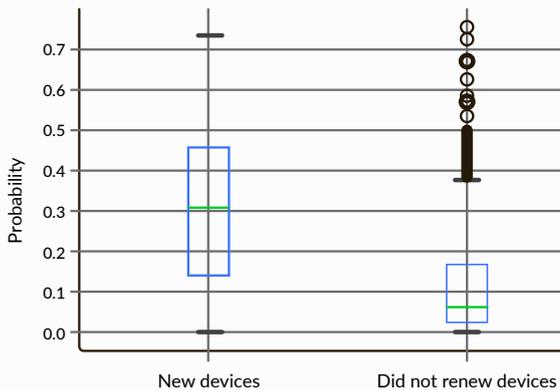


2. Analysis of disposable parts and consumable substances accounts with potential to increase market share showed an even higher concentration. Here, addressing just 7% of accounts covers almost 80% of high potential accounts.

The company could design a rich campaign, highly focused on this small yet highly potential group



Gain Graph of disposable parts & consumable substances accounts with potential to increase market share



Boxplot grouped by label of accounts with propensity to purchase new device

3. Analysis of propensity to renew devices, found that 20% of the accounts have a 7 times higher than average probability to renew devices.

Conclusion – clear ROI



The company deemed Verix a distinct success on both levels of streamlining operations – significantly boosting growth as well as improving the teams’ efficiency. Focusing on the right accounts at the right time with clear understanding of the issues at stake resulted in a 3-6X ROI on the first year’s implementation investment.

Specifically:

- Consumable substances market-share substantially increased
- Device sales increased by >9%
- Field force efficiency improved by 15%
- Analytics team efficiency improved by 10%



As summarized by the senior director of data analytics that led the implementation:

“Now we can proactively help the teams pinpoint what requires attention, what they should focus on next, and where might they have risks or opportunities”

Trusted by leading life sciences companies

Verix, a leader in cloud-based commercial optimization technologies for life sciences, has worked for over a decade with innovative companies to help generate billions of dollars in brand revenue and support the launch of dozens of products

